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SOME ASPECTS OF THE SETTLEMENT GEOGRAPHY
OF A TRINIDAD COMMUNITY

by

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A THESIS

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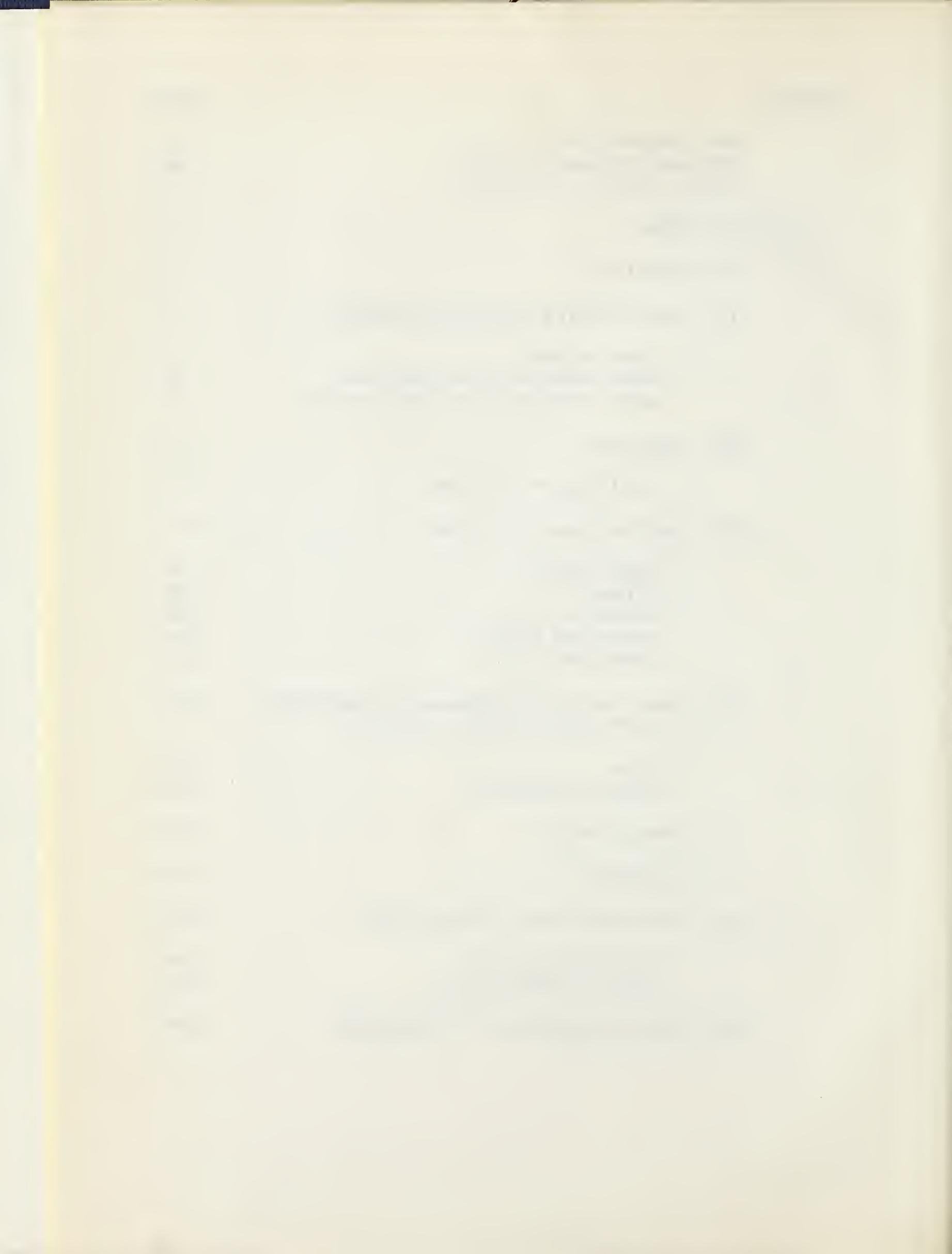


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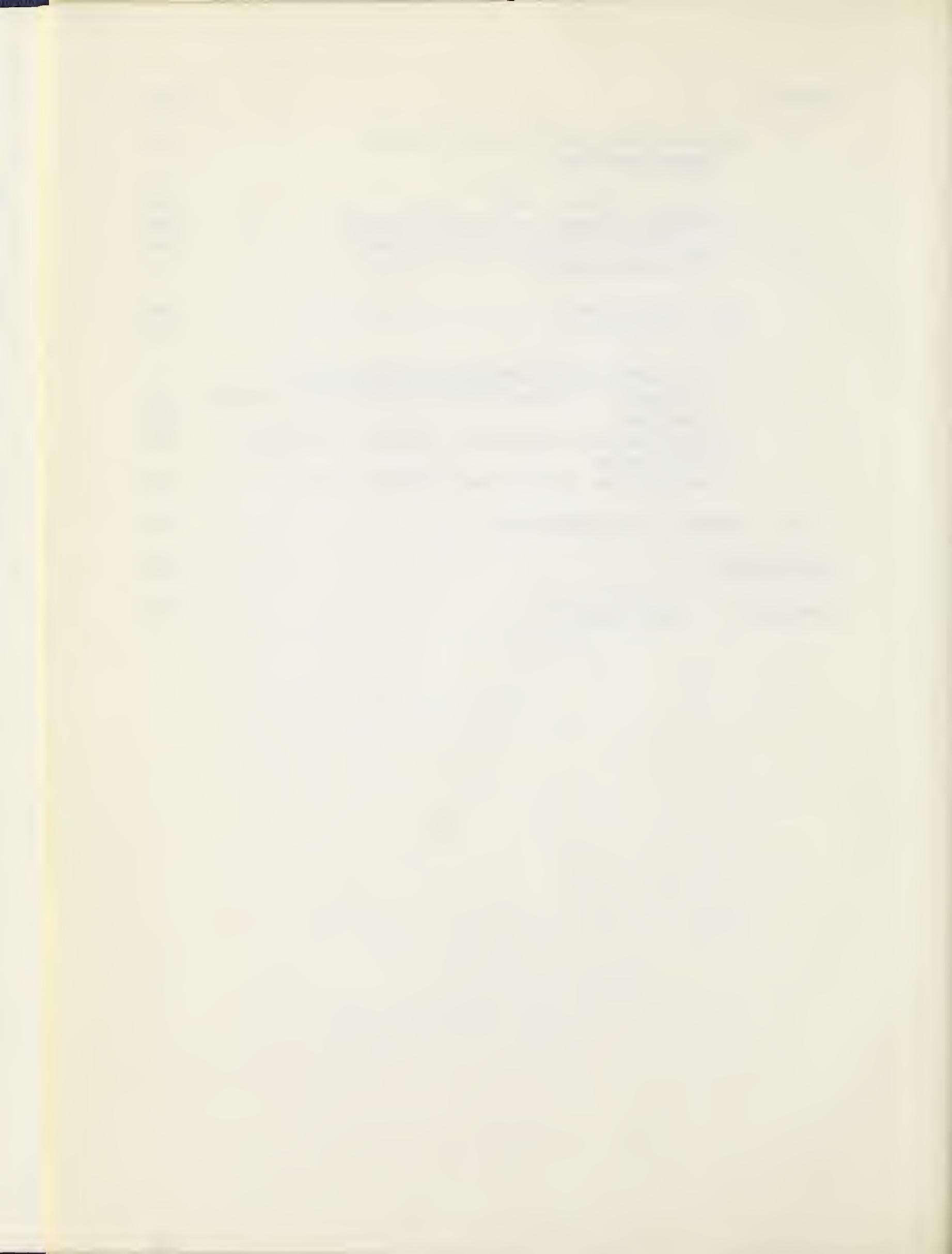
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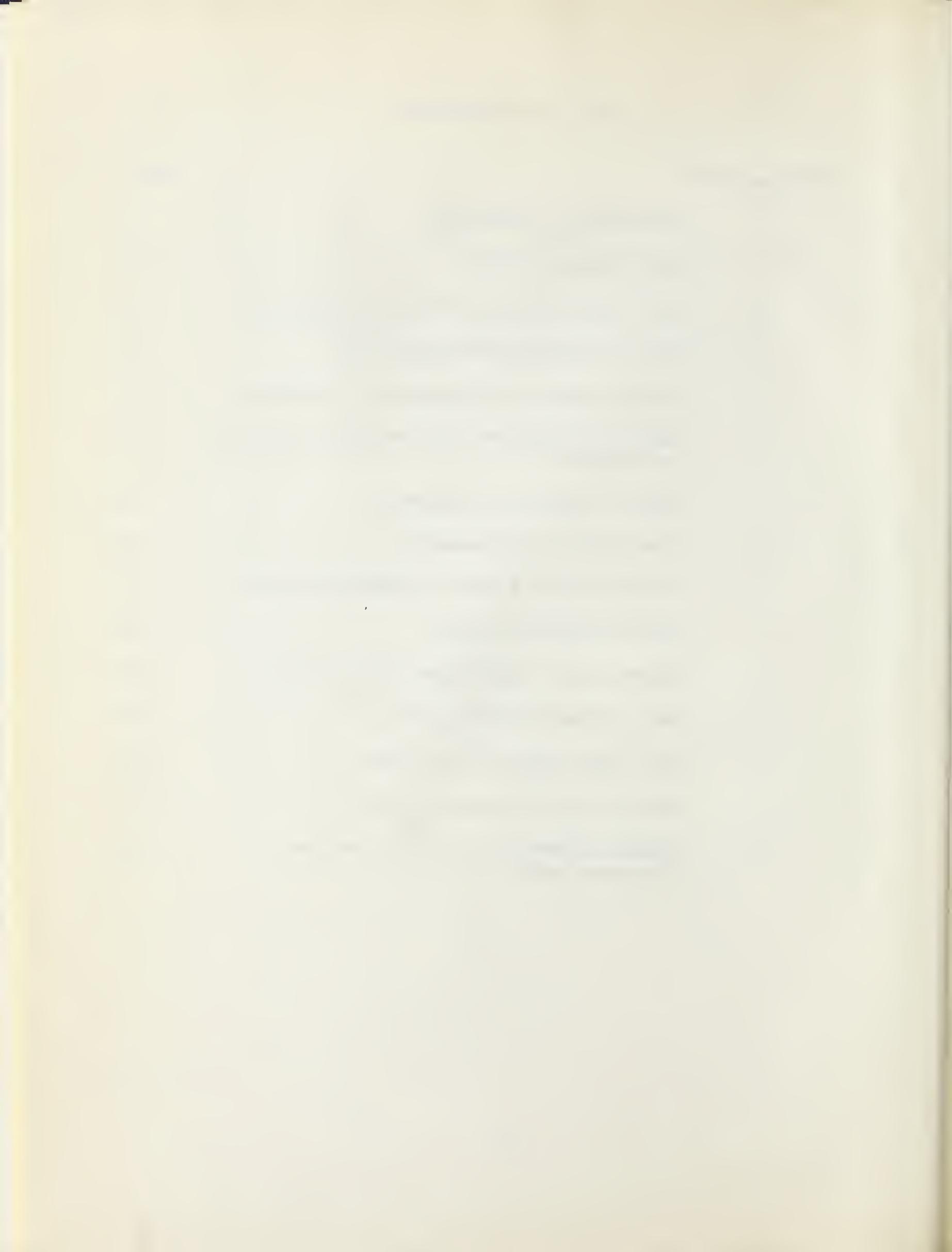


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CHAPTER I

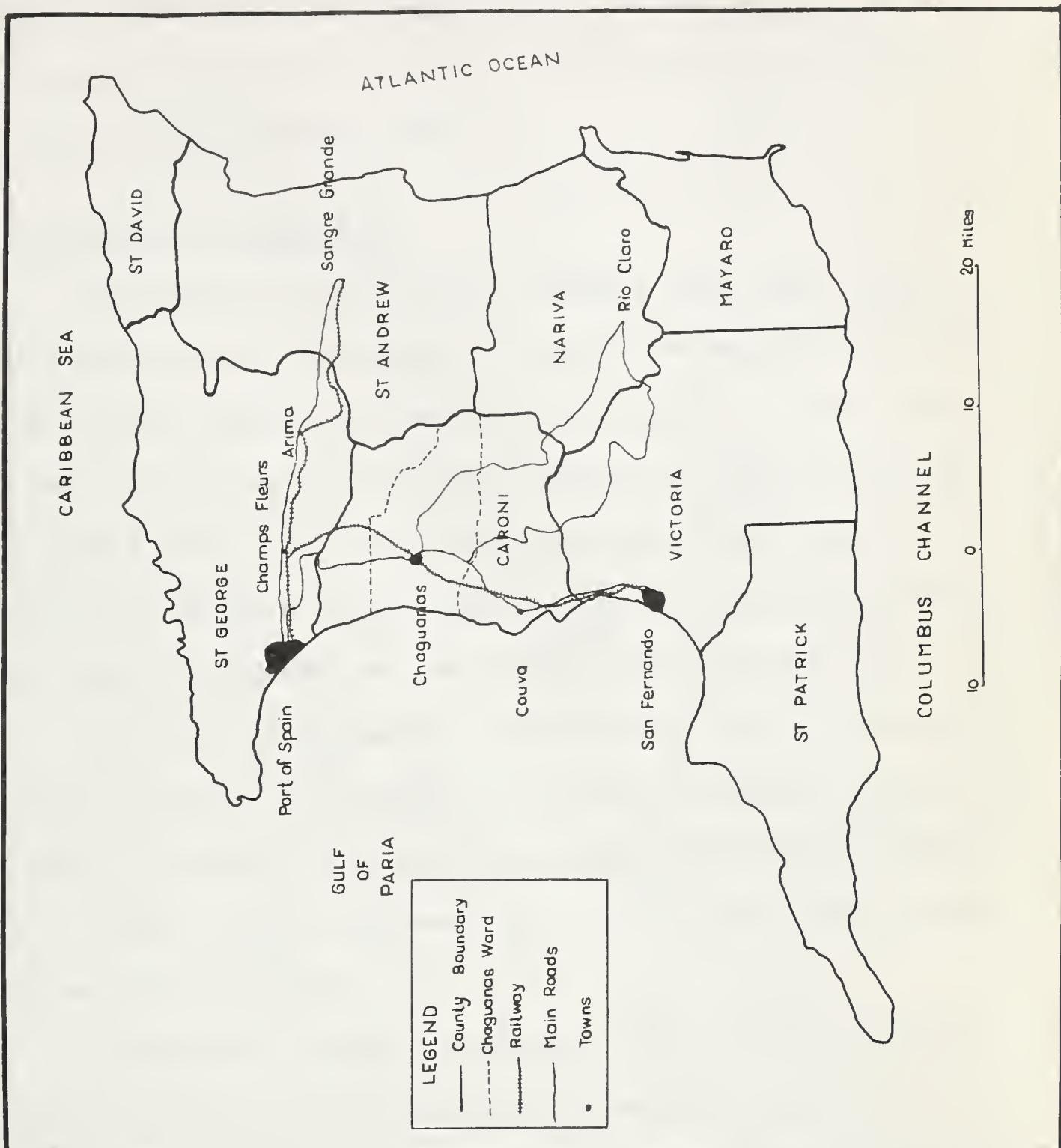
INTRODUCTION

The locus of the following study is in the town of Chaguanas in the small island of Trinidad. However, because of the complex mixture of peoples found in the island and in the town, this study area is a very significant part of the world in regard to social and cultural changes and consequently settlement patterns. Here are found peoples from Asia, Africa, Europe and North America and the processes of change among these groups are more intensified here because of the smallness of the area and the consequent increased contacts among the peoples. This study, therefore, attempts to analyse these changes in a historical perspective and to evaluate the processes involved in a settlement study.

Chaguanas, like other West Indian communities, exhibits a marked degree of similarity with its neighbouring community, because of the common historical background it shares with it. However, certain characteristics tend to set it apart from its neighbour and this study attempts to analyse these characteristics and to evaluate their impact on the total society.

In order to achieve the above objectives it is necessary to examine the Chaguanas community in relation to its

FIGURE 1 - LOCATION OF CHAGUANAS





Trinidad setting. As a result many comparisons are made with the Trinidad society and the uniqueness of Chaguanas is stressed wherever it is necessary. Because of the dearth of reliable literature on Chaguanas many of the generalizations are based on the results of two surveys which I carried out in Chaguanas in 1962 and 1964.

The Location of Chaguanas

The island of Trinidad is divided into eight counties which are further subdivided into wards corresponding in area to an Alberta township. The Ward of Chaguanas is the largest of four in the County of Caroni. Having an area of seventy-six square miles and a population of over 43,000 the ward covers four percent of the land surface of the island and has just over five percent of the island's total population.

The town of Chaguanas is the largest area of concentrated population in the Ward. It has an estimated population of over 14,000 and is situated approximately mid-way between Port of Spain and San Fernando, the two largest urban concentrations in the island.

Chaguanas is the cross-roads of the island's communication, its culture and traditions, a meeting place for all races and religions. As a centre for the marketing of products, both locally made or produced and imported, and for

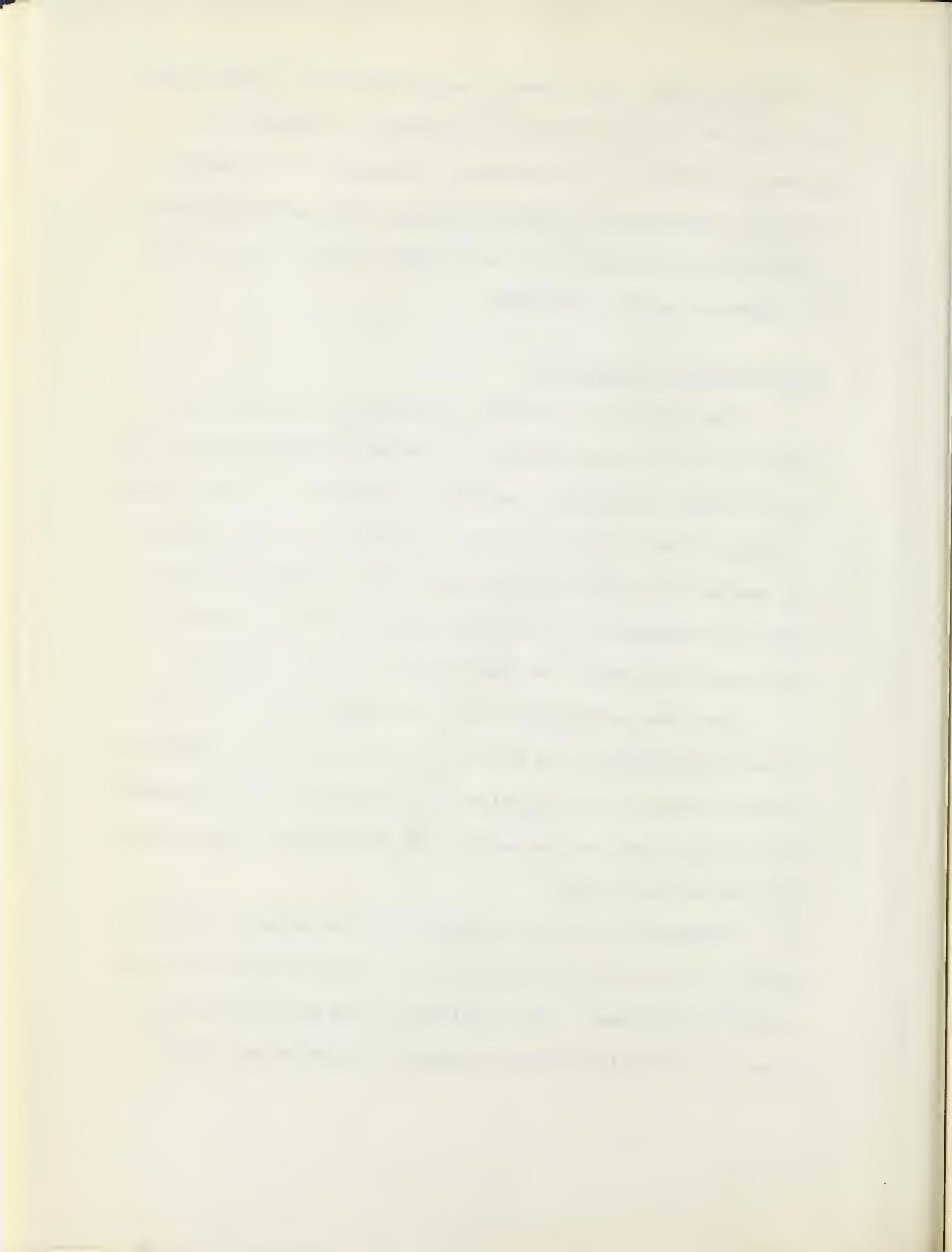


FIGURE 2
CHAGUANAS WARD.

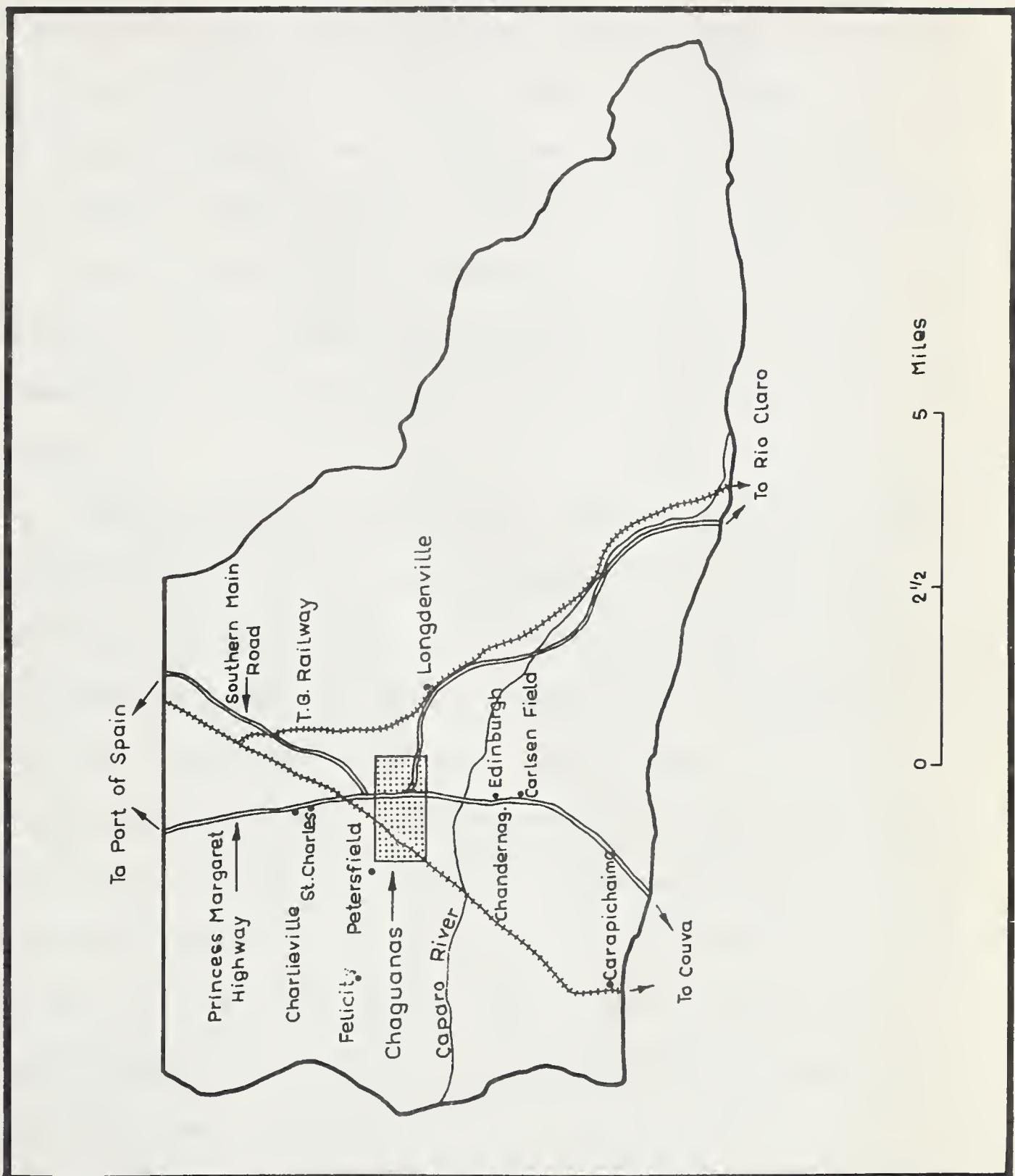




Figure 1. A faint sketch of a figure, possibly a deity or a person in traditional attire, standing and holding a long staff or object.

administrative and social services it is of prime importance not only to the Ward but to central Trinidad as a whole.

The Chaguanas Main Road is a continuation of the Southern Main Road which before 1951 was the only road connection between San Fernando and Port of Spain. Since then the Princess Margaret Highway which has been increasing the importance of the central location of Chaguanas has been constructed. Now, not only is the town nearer in both time and distance to these larger urban agglomerations but with increased flow of traffic it has become an important fuelling station.

During the past twenty years, because of the increasing importance in road traffic, railway traffic over the island has been declining. It takes twenty five minutes to get to Port of Spain by taxi from Chaguanas, as compared to fifty-five minutes by rail. This fact is important when it is remembered that commuting between Port of Spain and Chaguanas is on the increase, especially with employment opportunities being opened in Port of Spain. The competition between road and rail became so fierce that in 1965 the Government stopped operation of all passenger rail traffic between Port of Spain and San Fernando.

Chaguanas is continuing to grow in importance to the central areas of Trinidad. With increased opportunities for

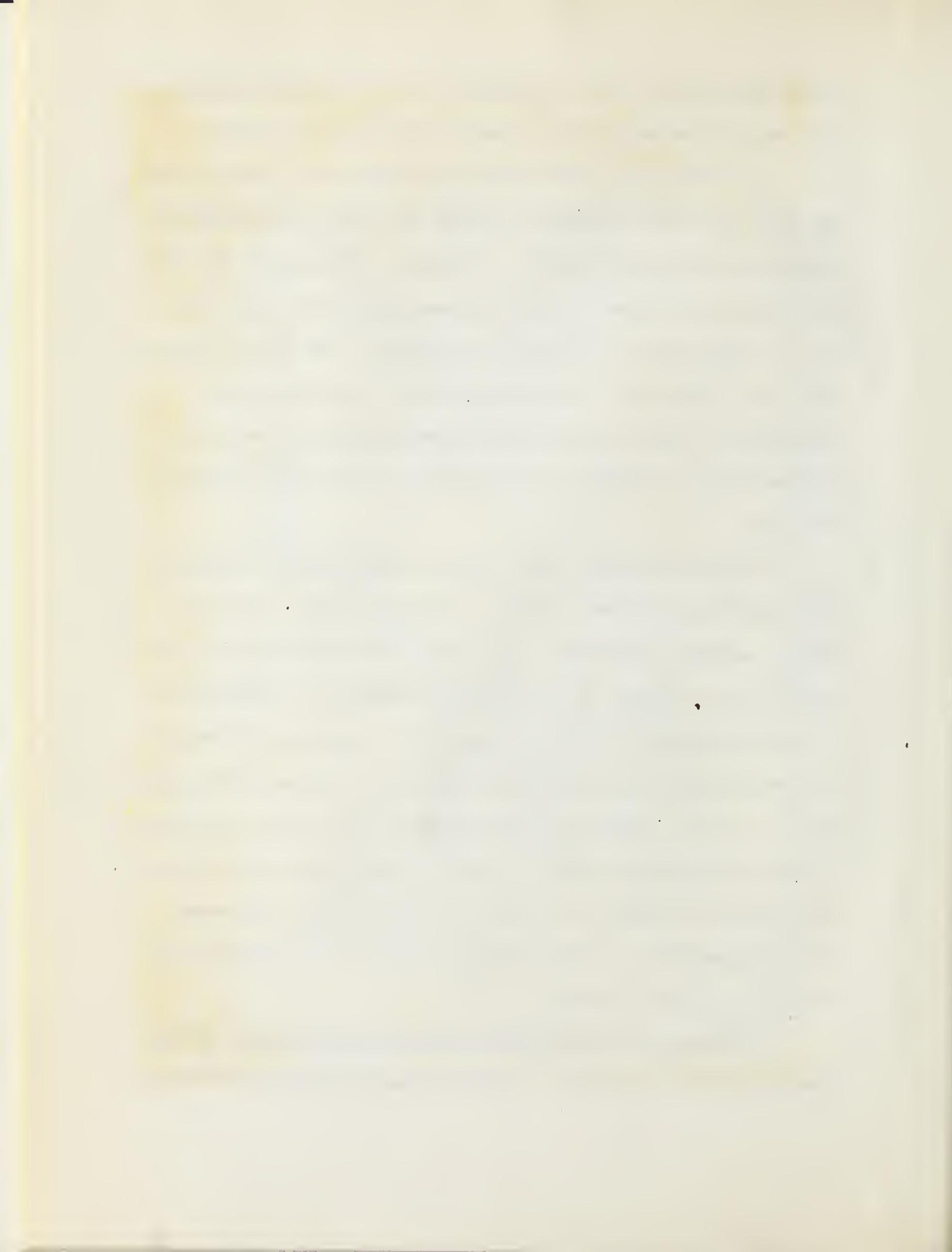




Fig. Photograph of Unaguana

jobs in town it is expected that further growth will take place and greater importance will be attached to Chaguanas as a centre for cultural, government, social and administrative purposes.

Determining the boundaries of the area under study

The Chaguanas area is bounded on the west by Petersfield, on the north by St. Charles, on the east by Longden-ville and on the south by Edinburgh. All these are small villages dependent to a very large extent on Chaguanas for their livelihood. Each of these villages is not more than ten minutes from the Chaguanas market and within a radius of two miles from it.

The criterion used to delimit the boundaries of the town and to separate it from these small satellites is that of the attendance of school children. From a line where it was found that fifty percent or more of the children of elementary school age attended schools in Chaguanas the boundaries of the town were drawn. Beyond this line were the villages. This was found to be the most feasible criterion for delimiting the area because the boundaries drawn corresponded closely to sugar cane plantations on the south, west and north and with junction of the Southern Main Road and the Chaguanas Main Road to the east. This point historically has separated

the villages of Montrose and Longdenville. Also persons beyond these boundaries tend to think of themselves as being from another district rather than belonging to Chaguanas.

In an effort to find the criterion for delimiting the boundaries many other criteria were used. If high school attendance in Chaguanas was used, it was found that the area which would have to be studied would have been over one hundred square miles. For practical purposes this area falls even outside the limits of the ward and thus would be too large an area to be adequately studied. For purposes of a sound analysis it was found that such an area was impractical.

Employment figures, attendance at church, shopping habits, the numbers of persons commuting to work, and historical factors were each in turn examined and each in turn was discarded because the area to be studied would have been too large. The only criterion for delimiting the area was that finally decided upon.

The town covers an area of about 1,500 acres, which is less than three percent of the area of the ward yet with a population of over 14,000 persons, it has more than thirty percent of the ward's population. Population density is over six thousand per square mile or just under one hundred per acre. From east to west the town measures two miles and from north to south it measures one and a quarter miles.



The Choice of Chaguanas

The main reason for choosing Chaguanas as the area of study is that twenty-two years of my life were spent here and without any written information about it, it became apparent to me that some study should be done aimed at a better understanding of the town. Furthermore, in 1961 a book called "East Indians in Trinidad" by Morton Klass was written about Felicity, an East Indian village about three miles to the west of Chaguanas. This book contained a wealth of information about East Indian culture. The question then became more important as to the changes which have taken place with a mixture and assimilation of various culture groups.

Originally I had intended to do a general survey of the "Population Geography of Trinidad." When I arrived in Trinidad in the summer of 1964 I decided to set upon this project. Immediately I was confronted by many setbacks. Firstly, officials of the various Government Departments refused or were afraid to give out pertinent information. Secondly when I went to the field to interview persons I was chased on one occasion, cursed on another, and was threatened by a gang on the third. My safety was of more immediate importance than field work at that time.

Chaguanas, to me, therefore offered the ideal solution towards an intensive study of a West Indian community.

Generally it had been known that this was a plantation on which Negroes, indentured East Indians and Europeans had formed the nucleus of the original settlement. There came afterwards Chinese, Portuguese, and peoples of all nationalities to the area. There was mixing and assimilation taking place. What settlement patterns had developed out of this? What were the effects on the economy of the area? How had population and population patterns changed? These were questions to be answered and these are the ones which this study will attempt to answer. In other words, an analysis of the evolution of the settlement and its social, political, economic and cultural patterns will be attempted.

Methodology

This study is an attempt at the analysis of the settlement of a Trinidad community. The main areas of research include field work, interviews, checking old records and maps. Many problems were faced among which were the reluctance of persons to give out information because they feared I was a "Government man". Other problems faced were the inefficient methods of filing data at the Government offices which at times made it impossible to analyze anything, and the tendency of persons being interviewed to be deliberately lying either for the purposes of deceiving me or to make themselves look

well paid, good living or otherwise. As a result it was necessary in many cases to disregard information of certain persons.

The field work involved the plotting of buildings, and the allocation of them into their various economic uses. Land use was also done in this manner and was checked with the 1964 Land Use Sheet of the Lands and Forest Department. In order to show the changes in land use over the period of settlement old records were checked and interviews done with the old citizens. The various operations carried on in the different land uses were established through visits to the factories, market gardens and plantations.

Over 1,000 questionnaires were handed out to the heads of families. Where the head of the family could not write I filled out the questionnaire. Seventy-three percent of the questionnaires were returned. Of these thirty-one percent were answered fully, and in over sixty percent more than half of the questions were answered. Persons were reluctant to answer questions regarding political parties, race, and income earned. Many of the answers given had to be disregarded because of suspected untruth. The reason for discarding them was that on rechecking the questions asked of the interviewees the answers given in many cases were opposite to those which had been written down in the earlier interview.

Throughout the study analysis is based on one hundred percent. Thus one hundred percent represents the number of acceptable answers to the questions asked. To illustrate why some of the answers were disregarded, it was found that in seventeen questionnaires obscene words were used as replies. In such a case the whole questionnaire was discarded. One of the major problems of this type of survey is whether to accept or reject the replies given to questions. This is one of the reasons why it is necessary to know the area being studied and the persons being interviewed.

There is a lack of literature and maps of the area. Much of the information on the general history of the plantation system has come from checking Klass's work on Felicity and Morton's about her husband's stay in Trinidad. For the history of Chaguana the old residents of the area supplied the bulk of the information. Wherever possible this information was checked with the files at the Warden's office. One man, one hundred and nine years old supplied quite a vivid picture of the late nineteenth and the early twentieth century conditions.

Basically, therefore, the methodology used is very simple and consists of, checking old records, books and maps. doing field work, interviews, and sample studies.

Much of the groundwork for this study was done in the

summer of 1962 when my visit to Trinidad culminated in a short dissertation presented to the University of Toronto. Apart from this, and the works of Morton and Klass, there is a dearth of material available about the area under study. This, to a certain extent, is original work which does not pretend to answer all the questions about the settlement geography of Chaguanas. Much more work can be done towards this end.

The Structure of the Study

In order to analyze and evaluate the various factors which are important in the development of settlement of Chaguanas it is necessary to divide the thesis into major sections, each dealing with a specific aspect of the area, but having in some way certain positive relationships with all the other sections. Cohesiveness is attempted as much as possible, keeping in mind that this is intended to be a study which tries to show spatial and areal differentiation.

The physical background of the area is dealt with first. Here is laid the foundation of area. As much as possible I have attempted to keep away from too much detail. Topography, vegetation, soil and climate are discussed and are related to the human environment.

The history of the area is then discussed. The main

theme here is to show the relationships among the various ethnic groups which have come into the area. These relationships are evaluated in connection with the plantation system which began here in the second quarter of the nineteenth century and with the apparent breakup of this system, the emancipation of the slaves, the importation of indentured labourers, and the overall history of population growth and the rearrangement of settlement and cultural patterns between that time and 1965.

The section on the demographic characteristics analyses the differences in population growth pattern, age, sex, religious composition and family size and structure among the various ethnic groups. Wherever it is necessary, comparisons with other Trinidad areas are made. To some persons this section may appear more pertinent to an anthropological study. It is the contention here that no proper understanding of the area under study can be had without an attempt to analyze the characteristics mentioned above and to show the reasons for similarities or differences among the various ethnic groups. Furthermore, it should be remembered that attitudes towards one another in a community are vital to the proper functioning of that community as a progressive group in the island.

The section on the economy of the area forms the major section. This section attempts to continue the cohesiveness

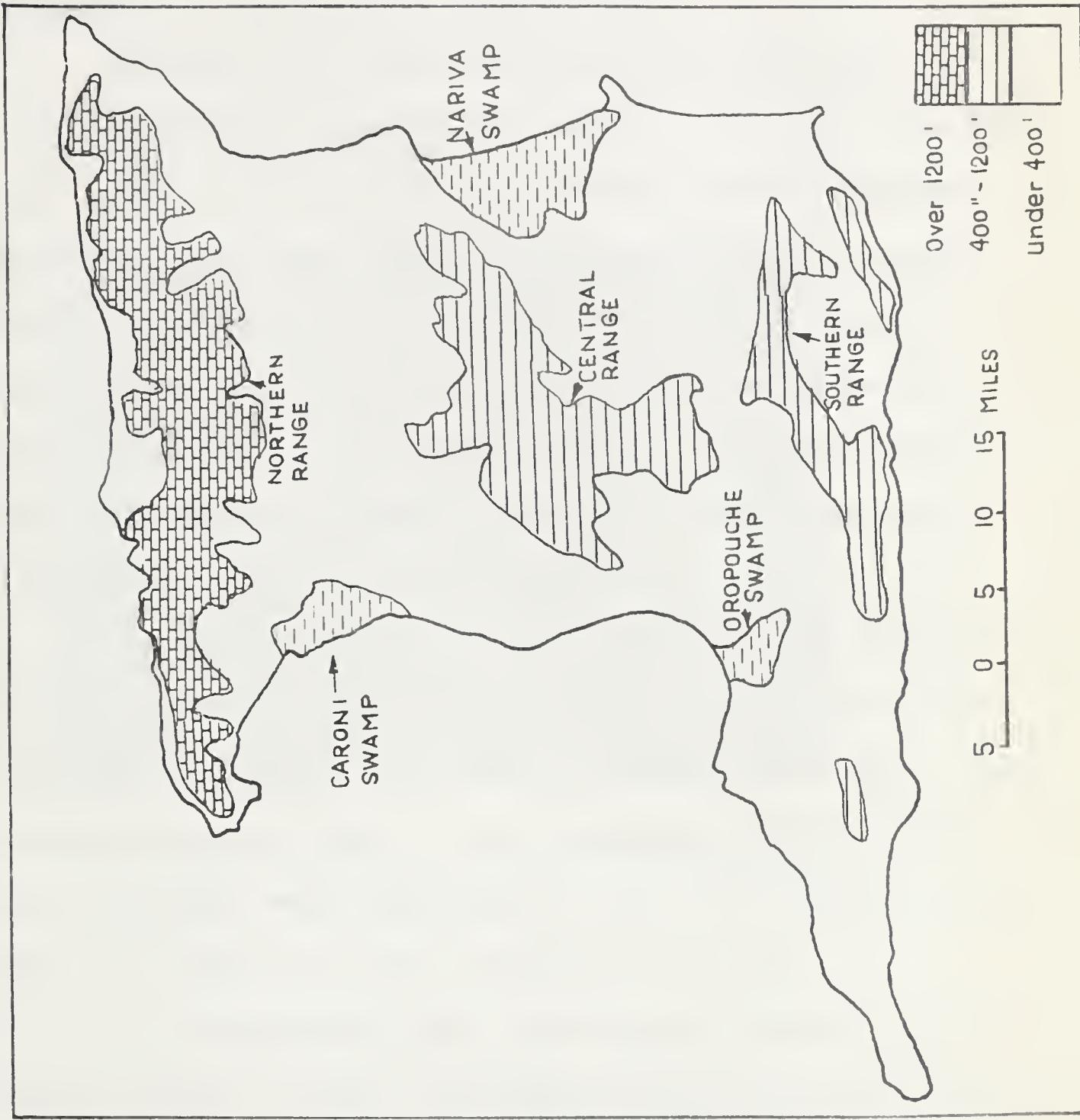
of the study in its evaluation of the land use, holding, size, values, land and labour productivity and the changes which have taken place throughout the period of settlement. Causal relationships are shown as much as possible and the problems which the area faces are discussed with an eye towards future development of the area and solution of the present problems. Such solutions are suggested only when facts are present in support of them.

The political, social and cultural characteristics of the area are next discussed. This section attempts to analyse the various attitudes of the population towards these factors. Many of these attitudes were formed in the days of early settlement and an attempt is made to show how these have affected the present day situation. The election of 1956 is used as a major breaking point and as an illustration of the changes which have taken place in the whole society. As much as possible no interpretation of facts is attempted, the reason being that should this be done it is feared that some sort of bias may enter into the analysis. Changes and the reasons for changes are those which have been reported by interviewees. In order to summarize the whole section, the Chaguanas market is studied as a case of cultural geography.

The final section summarizes the whole study and

attempts some general conclusions on the present conditions and the future trends and problems of the area. This does not pretend to be the definitive study of Chaguana but it is hoped that a better understanding of a Trinidad community can be had from it.

FIGURE 3 TOPOGRAPHY OF TRINIDAD



CHAPTER II

THE PHYSICAL BACKGROUND

Topography

Basically the island of Trinidad can be divided into three highland and three lowland regions. The only true mountain system is the Northern Range which rises to a maximum height of 3,085 feet. This range forms an almost complete barrier for fifty miles across the north of the island. It rises so abruptly from the northern shore that there is no coastal plain. On its southern flanks it is less steep and rivers have carved valleys and deposited gravel fans where they flow out into the Caroni Plain.

The Central Range is a broad highland mass running diagonally across the centre of the island from north-east to south-west and rising to a little more than 1,000 feet. The Southern Range is lower and much narrower. Both of these highland masses merge imperceptibly with the surrounding lowlands and present no great contrasts with them.

The Caroni Plain which lies between the Northern and Central Ranges is lower and flatter in the west than in the East. It is drained by the Caroni and Caparo Rivers which end in a large mangrove filled swamp. The Naparima Plain in





The Chaguanas Plain. Note the flatness of the land and the Northern Range in the background.

the south-west is much more undulating than the Caroni Plain and drained by the Oropuche River which also ends in a swamp. To the east along the Atlantic coast lies the Nariva Swamp drained by the Ortoire River.¹

Between the Northern and Central Ranges and along the Western half of the island lies the Caroni Plain with its northern fringe the Caroni Swamp. Chaguanas stands on the central part of the plain, an area called the Chaguanas Plain which is between twenty five and seventy feet above sea level.

The town is bounded on the west by the twenty five foot contour which approximates the eastern boundary of what was formerly a two mile wide swamp. Through the centre of town, is the fifty foot contour which parallels the Government Railway line except to the north where it veers somewhat to the east. The eastern limits of town are about sixty five feet above sea level. Nowhere is there any appreciable depression or rise.

The trip from west to east gives an ascent of forty feet over a distance of two miles. Generally this rise is imperceptible and it is during the rainy season that the monotonous flatness of the area is noticed for a gradient of 1 in 264 certainly does not afford an easy escape for the flood

¹ J. Macpherson, Caribbean Lands, London: Longmans, 1963, pp. 52-53.

waters of torrential tropical showers. In general, the area has the appearance of an extremely flat plain dotted here and there with trees and covered with closely clustered, densely populated houses.

Soil and Vegetation

The soils of Trinidad owe their nature largely to the underlying rock. The complex geology of the island, related closely to the adjacent South American continent, has given rise to a diversity of soil types within a short distance.²

The rocks of the Northern Range produce a poor shallow reddish yellow soil best left in forest. Where clearings have been made soil erosion has extensively occurred.

In the Caroni Plain, the clays like the Cacandee and Petersfield to the west of Chaguanas are dominant. These are covered with a layer of alluvium deposited by the rivers and their tributaries. Towards the Central Range these clays merge with sands and gravel which are poor and of little use and support a very thin forest cover. In the Naparima Plains clays are dominant. These support a swamp vegetation in the depressions and a savanna vegetation on higher ground.

In the Southern Range sands and clays predominate and are forested. In the western tip of the island and along the

²Ibid., p. 58.

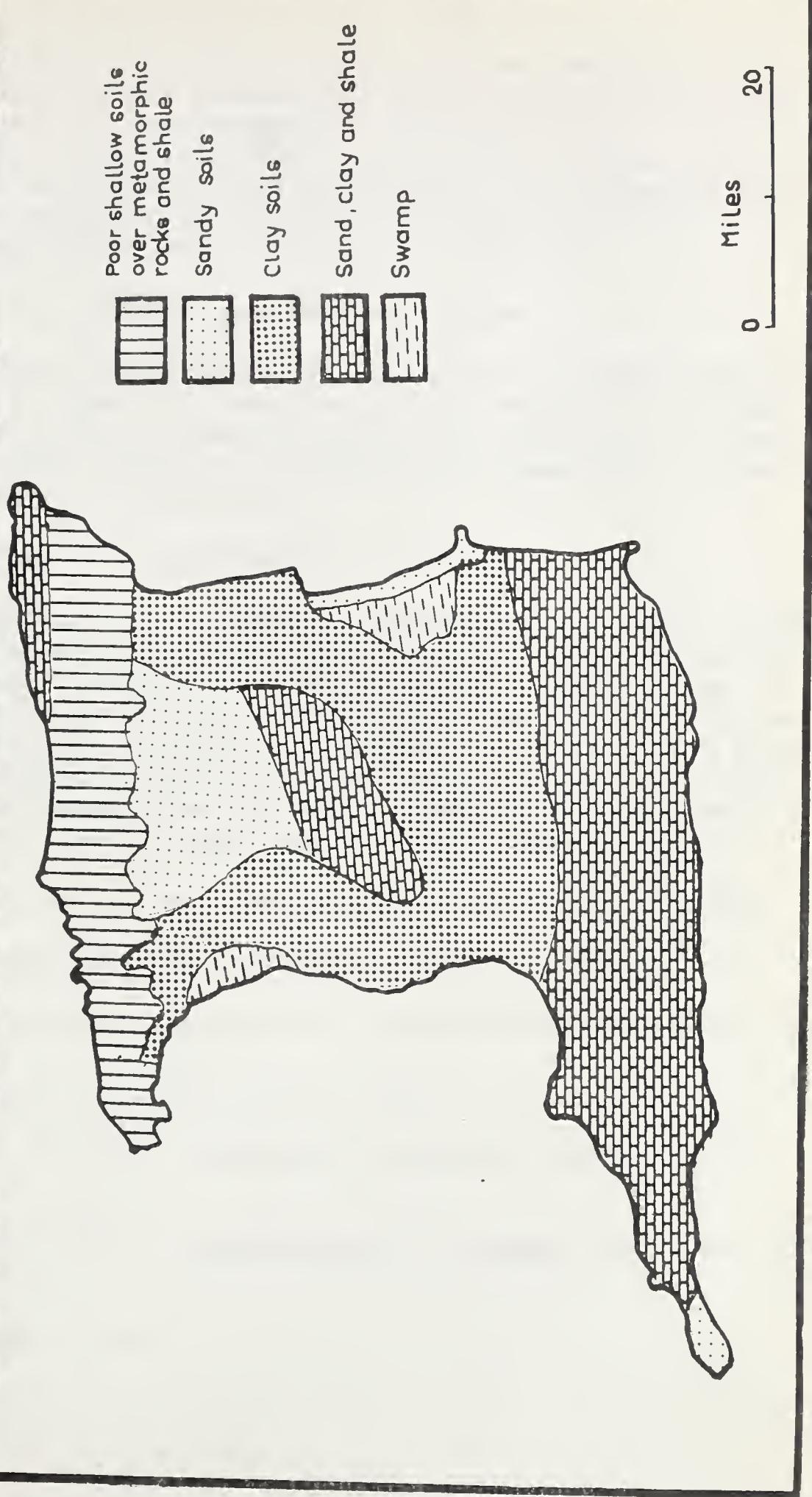
south and east coasts sandy beaches and coconut plantations are found. The Nariva Swamp area is covered by mainly clays, alluvium and silt and the vegetation cover is mangrove swamp.

Because of the presence of the Caparo River to the south and of other smaller tributaries, the area is composed mainly of an alluvial type soil. This soil has been deposited by the repeated floodings during the months of June, July and August. The Caparo River, which originates in the Central Range, has a fairly rapid flow in its upper course, but once it reaches the Chaguanas Plain, its speed being checked because of the flatness of the land, it begins to deposit its load.

Various local names have been given to the soils of the area depending on where they are found. Examples are, Cacancdee Clay to the extreme west, Perseverance Clay to the south or Endeavour Sandy Loam to the North and East. All of these are of comparatively recent origin with a fairly thick clayey top. They are blackish when wet and dark brown when dry. Mangrove deposits are found at about nine to twelve feet below attesting to the presence of a former swamp. Drainage is impeded and a high water table is noticeable.

Most of the vegetation has been removed off the land with the exception of a few stunted bushes. According to

FIGURE 4 SOILS OF TRINIDAD



Collins,³

The soils of Chaguana, are of the description of crabland from the innumerable holes made by land crabs. Chaguana has the reputation of being a dreary, kill-joy sort of a place with legions of mosquitoes and sand-flies. So it may be but the forests and highwoods are full of hidden treasures that the keen and vigilant eye of a naturalist may spy out and gloat over.

Around the same time Morton,⁴ wrote:

We soon found ourselves in the rice fields which are fast extending till what was lately regarded as a swamp. ...It has always been treeless and the burning of the long savanna grass in the dry season goes far to prepare the land for cultivation.

Earlier it was stated,⁵

The land is low and flat but capable of being drained. It has never grown trees but is covered with a crop of tree grass too tall for man or horse to get through.... The road however is infamous, from the nature of the soil which is rich and deep and without a pebble....The place is not particularly unhealthy, but complaints as to the flies and mosquitoes at certain seasons of the year demands the utmost resources of their language. (321)

These two sources seem to be at variance with each other regarding the type of vegetation.

According to a Chaguana informant there were patches

³J.H. Collins, A Guide to Trinidad, London: 1888, pp. 140-141.

⁴Sarah Morton, John Morton of Trinidad, Toronto: 1916, pp. 325-326.

⁵Ibid., p. 321.

of guava⁶ trees especially in the sandy loam area and groves of bamboo were found along the river banks. However, types of water-grass with innumerable snakes predominated. The only large trees were the mango and the immortelle with a few creepers and vines. Undergrowth was considerably thick. There was a sprinkling of mangrove towards the western limits. This description has been substantiated in the main, by my father who has lived in Chaguanas for over fifty-five years.

Generally it can be said that the area was never a "treeless swamp" nor "forests and highwoods," but was covered with some sort of a savanna vegetation. The mosquitoes and flies are still there today. The snakes have been almost eliminated, the soil is well drained and the roads are no more "infamous."

Climate

Because of the location of Trinidad at 10° to 11° North Latitude, its temperature range is generally very small. Temperature is lowest in January when it averages 77° F. This rises to 81° F in May, just after the sun has passed over-head on its way to the north. For the next few months it is a little cooler but because of the increased humidity in the

⁶A small fruit in the shape of a pear growing on a perennial, hardwood, spreading tree.

rainy season sensible temperatures are uncomfortably hot.

As the sun moves south towards the equator, temperatures again rise as September is almost as hot as May. Relief from the heat is not easy to find.

As can be seen from the rainfall map the heaviest rainfall occurs in the Northern Range, the crest of which is often cloud-capped. From here a belt of more than 100 inches a year extend along almost the whole length of the eastern side of the island. To the west the amount decreases but not to a marked extent for the only mountains high enough to cause a noticeable rain-shadow, the Northern Range, run parallel to the prevailing North-East Trades. The tips of the two westward pointing peninsulas have less than 60 inches per year.

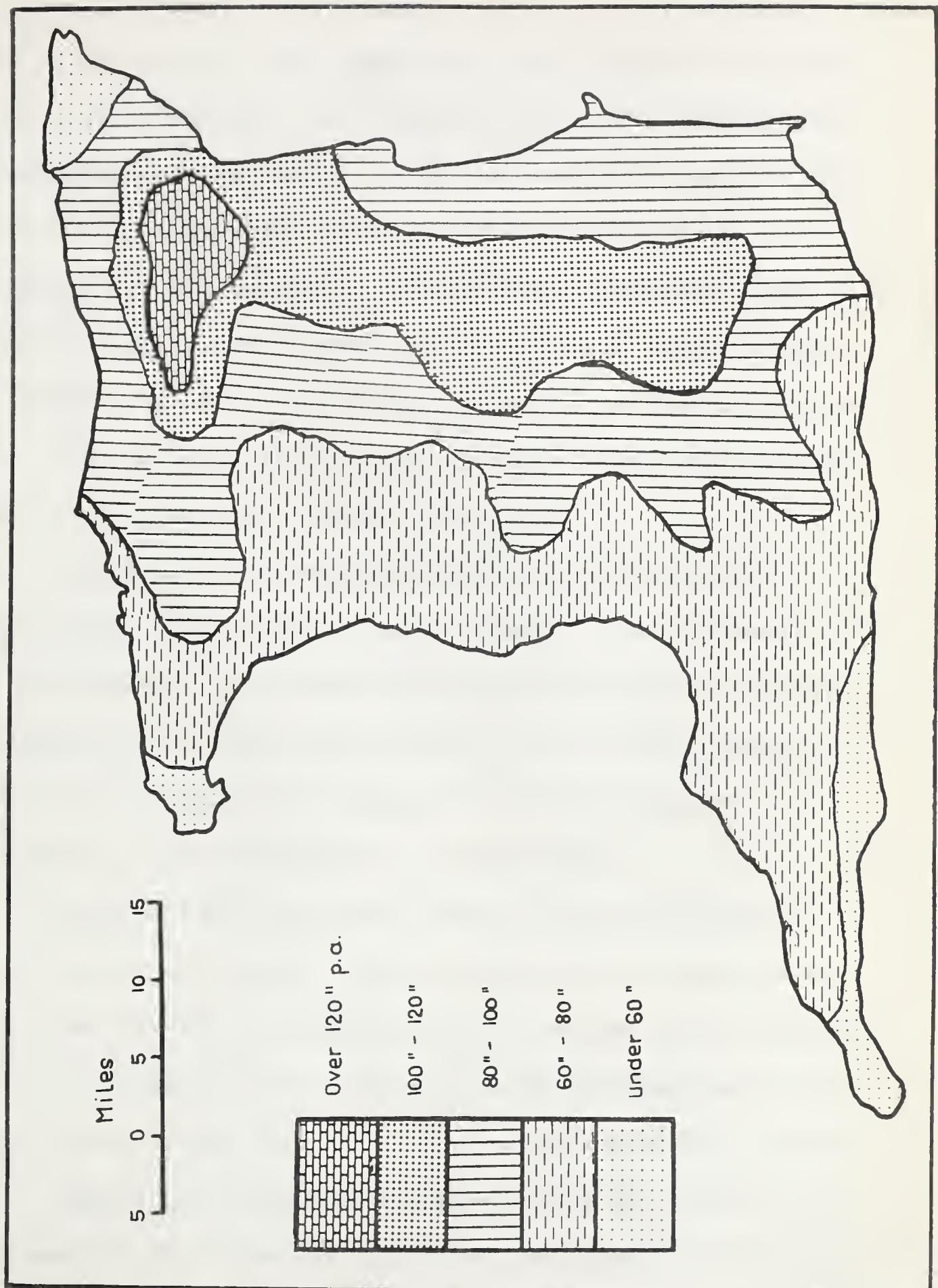
The rainy season normally begins towards the end of May or in early June and continues towards November, though a dry season called the Petit Careme occurs for about two to four weeks in September or October. The driest month of all is March.

Trinidad is unique in the West Indies in that it lies south of the path of the regular hurricanes. There have been only three storms of any damage during the island's known history, the last one being as recent as 1964.

In the town and even throughout the whole ward there is a similarity of climate and conditions. Situated on the



FIGURE 5 RAINFALL OF TRINIDAD



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western side of the island and in the lee of both the Northern and Central Ranges, the town of Chaguanas is one of the driest parts of the island. The reason for this relative "dryness" is that the prevailing, rain bearing North East Trades have dropped most of their moisture in the North East section of the Northern Range where rainfall averages of over one hundred inches are not uncommon. These winds, relatively depleted of their moisture, then sweep across the vast Caroni Plains. As a result, rainfall is relatively low, around 64 inches per annum. This average is not much different from the averages taken at other western parts of the island.

The climate of Chaguanas can be classified as a savanna type. There are two main seasons: the dry season from mid-January to the end of May; the wet season runs from the beginning of June to mid-January. This latter season is punctuated by a short dry-season, the "Petit Careme" or Indian summer from mid-September to mid-October.

Rainfall readings taken from the files of Woodford Lodge Estates, now Caroni Limited, show monthly averages of 2.29 inches for the dry season and 7.45 inches in the months of June, July and August. Lowest average is March with 1.5 inches but less than .2 inches have been recorded in a March month. August has the highest average reading of 8.6. In the summer of 1964 over 13 inches was recorded for July in

Chaguanas.

Rainfall during the dry season is very uncertain. During 1962 a duration of $2\frac{1}{2}$ months was experienced without any significant amount of rainfall while in 1954 the month of February was so wet that the harvesting of sugar cane had to be stopped because of the inability of both man and machinery to cope with the "sodden" conditions. Examples of exceptional periods of drought or of too much rain in the dry season have been mentioned on many occasions during my interviews.

Periods of dryness cause acute domestic water shortage especially in Chaguanas which depends on piped water supplied from a small reservoir at Carlsen Field, situated about two miles south of Chaguanas. It is not uncommon to see trucks bringing water to be distributed to the homes which have their supply of piped water shut off for periods during each day in order to raise levels at the reservoir and to prevent abuse of supply. This shortage is due mainly to poor climatic conditions. Vegetable prices are remarkably high during this period.

During the wet season one can tell when rain will fall. Thick, blackish, heavy clouds build up because of convection. Showers are usually heavy and of short duration and are normally followed by brilliant sunshine. At this season rain falls nearly every day and towards the beginning of the wet

season and the advent of the Petit Careme this rain can become a persistent drizzle. However, such days are rather unusual, and together with continuous overcast would be the exception rather than the norm. There is normally a constant breeze but rarely ever a strong wind.

Relative humidity during the dry season ranges between fifty and seventy-five percent and in the wet season is nearly always 100%.⁷ The nights are invariably cool. Hottest days and nights are experienced during the Petit Careme.

Normal temperatures are around eight-four degrees F. by day and seventy-four degrees F. by night with an annual mean of 77.5° F. and an absolute range from sixty-four degrees F. to ninety-six degrees F. Although temperature readings are relatively high, conditions as experienced by a Trinidadian, are rarely unbearable because of the fairly constant breeze during all seasons. Stickiest conditions are however felt in the late part of the wet season and during the Petit Careme, although the highest temperatures are recorded in May.

Readings taken at Longdenville, 3 miles east of Chaguana, show an average day-time temperature of 86.4° F. in June 89.8° F. in May and 90.1° F. in March. The minimum night temperatures are 67.6° F. in February and 71.8° F. in September.

⁷ Files at Woodford Lodge Estate and Endeavour Estate, Chaguana.

During the dry season skies are normally clear and because of the intense radiation temperatures close to the earth's surface rise sharply. Conversely terrestrial radiation during the night causes a relatively rapid cooling. During the rainy season because of the rainfall or sodden ground and stagnant water, evaporation is accompanied by a cooling off process during the day and because of the fair cloud cover at night a relatively warm night is experienced.

Except from minor seasonal and average changes the Chaguanas climate is not atypical of Trinidad. No severe hurricanes have ever struck the area, although winds up to fifty m.p.h. have been experienced in 1964 when damage to some extent was recorded in the North East part of the island and in the neighbouring island of Tobago. Severe lightning and thunder are not uncommon and during the dry season 'bush fires' are very prominent but of little damage.

TABLE I

RAINFALL AND TEMPERATURE FOR PORT OF SPAIN AND CHAGUANAS

Port of Spain:

	J	F	M	A	M	J	J	A	S	O	N	D	Yr.
T.	75	75	76	78	79	78	78	78	76	78	78	76	77.3
P.	2.7	1.5	1.8	1.8	3.6	7.9	8.8	9.6	7.4	6.6	7.0	4.7	63.4

Chaguanas

76	77	79	78	78	78	78	78	78	78	78	77	75	77.5
2.2	2.0	1.5	2.8	5.0	6.0	7.5	8.6	6.0	6.0	6.8	4.6	61.1	

According to Koppen classification Port of Spain has an Am climate, and Chaguanas an Aw. Thus it is seen that over a very small area climate types change, but at some time it would appear to the observer that Trinidad has an Af and at other times Aw or an Am climate. There have been years when no month had less than 2.4 inches and other times when less than three months recorded under one inch. As would be noticed from the above table there are only differences of a slight degree between Chaguanas and Port of Spain for which station the recordings were made at International Airport at Piarco about eight miles east of Port of Spain and ten miles north of Chaguanas.

CHAPTER III

THE HISTORICAL BACKGROUND

Historical Introduction

Christopher Columbus discovered Trinidad on his third voyage in 1498 and it was more than thirty years afterwards that the first Spaniards began to settle here. They found the island sparsely peopled by Arawaks tribes, who, unlike the fierce Caribs on the islands further north, could be made to work on the land. In spite of this, development was slow. There were no deposits of precious metals to attract settlers and those who established plantations met many setbacks. They were raided by English and French, and their chief crop, cacao, was struck by many diseases. Many settlements were abandoned and by 1733 the number of Spaniards had fallen from several thousands to one hundred and fifty.¹

The island drifted on in Spanish hands; the Amerindians decreased in numbers. Negro slaves grew cacao for a handful of white settlers. Recovery was slow until 1783 when Spain offered special encouragement to foreigners of Catholic faith to settle Trinidad. Frenchmen came from both Canada and the

¹J. Macpherson, Caribbean Lands, Longmans, 1963, p. 52.

Lesser Antilles. Free grants were issued of thirty acres to each white man and half that quantity to each free blackman with half as much again in either case for each slave possessed.²

Don Jose Maria Chacon was sent as the Spanish Governor of the island to carry out this settlement plan or "Cedula" as it was called and the result was that the population of the island which in 1783 was under 3,000, in 1797 numbered nearly 18,000.³

This scheme, therefore, tended to populate a Spanish island mainly with Frenchmen, to bring in doubtful characters who had fled to Trinidad during the revolutions in Haiti and France and to set a special premium on slave-holding. The French settlers also brought coffee and new varieties of cocoa and sugar cane with them and planted cotton as well. When the British under Sir Ralph Abercromby took the island in 1797 they found a belt of cultivation along most of the west coast and scattered plantations in other coastal districts and in some valleys leading up into the Northern Range.

Trinidad became a dependency of Great Britain, the

² C.P. Lucas, Historical Geography of the British Colonies, Vol. 2, Oxford: Clarendon Press, 1905, p. 239.

³ Ibid., p. 239.

concession being confirmed by the Peace of Amiens in 1802.⁴

The sugar industry, which had developed when Haiti ceased to export sugar after the revolution, continued to expand under the British. British laws and procedure were gradually substituted for Spanish. Slaves were brought in to work on the sugar cane fields and because of the late start there were only 21,000 slaves in Trinidad at the time of their emancipation.

It was therefore necessary to import labour from other sources to alleviate this labour shortage. As early as 1806 a few Chinese had been brought into the island and subsequent to emancipation a stream of immigrants was^e poured into the island, West Indians, liberated Africans, Chinese and most of all indentured East Indian coolies.⁵

In the seventy-years that the indentureship system lasted over 140,000 East Indians went to work in Trinidad - about a third of the total that came to the Caribbean.⁶ About three out of every four remained when their contracts were expired and their descendants form a large part of the population today.

⁴ Ibid., p. 241.

⁵ Ibid., p. 241.

⁶ A. Niehoff, East Indians in the West Indies, Milwaukee: 1960, pp. 14-21.

The population of the island which in 1834 totalled 43,613, ten years later numbered 60,000. In 1851 it was 83,000,⁷ 1915, 333,000,⁸ and 1960, 825,000.⁹ The estimated 1965 population is 940,000.⁹

The history of the island is a simple one. It was a neglected Spanish dependency and became a thriving British colony. It is almost as if the island had not been discovered until 1783, a new and empty land drawing the population from an overflow of other countries and like many other places, peopled in the first instance by persons of bad repute. Since then there has been a period of development in the colonial era which lasted until 1962 when the island gained its independence from Britain.

Chaguanas - History to 1915.

The beginning of organized European settlement in Chaguanas dates from about the second quarter of the nineteenth century when the plantation system of agriculture was introduced into the area by two Englishmen, one Frenchman and one "local white." Two major crops were cultivated, cocoa to the east

⁷ Census of Trinidad, Port of Spain, 1946.

⁸ Census of Trinidad, Port of Spain, 1960, Table 1.

⁹ Pers. Comm. Vital Statistics Office, Port of Spain, 1965.

and sugar cane to the west. Unlike in most other plantations it was cocoa rather than sugar-cane which was the dominant crop at this time. The settlement was in three little clusters, St. Thomas to the West, Montrose to the East and Perseverance to the North. Before this time, the area was covered by a mixed swampy savanna type vegetation. Negroes formed the only working group in the area and not more than 150 were settled here by 1840.

With the emancipation of the slaves, throughout the island the Negro's main objective was to leave the plantation, to escape the shackles of slavery and to seek his fortune in the urban areas. However, because of the black peasantry throughout the whole island, and more because of the news of poverty among the Negroes, the barracks¹⁰ at St. Thomas remained their home and the plantation their place of work. By 1850 numbers had risen to about 400 because of movement of Negroes from other districts into Chaguanas.

There were three basic reasons why this movement took place. Firstly, sugar prices were rising in Europe and as a result new lands were being brought under cultivation. Secondly, and more important, because of the more generous

¹⁰A term referring to very poor row houses made of board and housing as many as six persons per 100 square feet of floor space.

wages and better housing conditions the Negroes found this area much to their liking. Thirdly, at Perseverance, there was erected a central centrifugal factory which decreased the amount of physical work which had to be done at the factory. Added to these was the fact that the area was relatively newly settled, and there were many opportunities for development. In the meantime St. Thomas was expanding eastward, Montrose westward and with the barracks around Perseverance and Woodford Lodge the nucleus of the town was being formed. Lack of precise statistical data prevents usage at this point.

However with all this seeming prosperity the freedom of the slaves appeared not yet complete. According to one source, "Even the slaves were not freed but a sort of apprenticeship took place of all labourers - this act freed only children under six years."¹¹ This statement referred to 1838 but even until 1854 this situation tended to be present.

By 1854,¹² "whenever possible the freed slaves purchased lands of their own, in some cases joining together to purchase abandoned¹³ estates for subsequent subdivision among

¹¹ J. Parry and P. Sherlock, A Short History of the West Indies, London: 1956, p. 194.

¹² West Indies Royal Commission, London: H.M.S.O., 1945, p. 6.

¹³ Plantations were abandoned because of poor management and use of land during the Spanish and Early British rule.

themselves." Because of the relatively recent cultivation of the Chaguanas area there was very little exodus taking place from here and such a statement would apply more to the northern parts of the island. The result was that instead of disdaining to come back, most of the "freed" slaves did so with few exceptions.

As a result population grew and with the construction of the Trinidad Government Railway around 1860 and with the opening of roads from Chaguanas to the convict depot at Longdenville and to Charlieville, the town became even more amenable to growth and settlement.

By 1875 Collins,¹⁴ had written,

St. Charles a small estate belonging to Mr. Smith is on the right near Chaguanas while beyond it on the left is Endeavour. Opposite this latter is Woodford Lodge the property of Hon. G. Fitt and Mr. S. Henderson. The oscillated centrifugal system has been improved here with satisfactory results. You cross Chaguanas road immediately before entering the station. A village is gradually springing up in the neighbourhood. A new police station and a hospital have been built, while shops and houses are rapidly appearing here and there. To the east is the Montrose cocoa estate. To the west is Perseverance and Chaguanas village with its Roman Catholic and Anglican Churches. A new church is being built for the former denomination close to the line.

Population continued to grow with an estimated 1500 in 1885, the Negroes outnumbering the East Indians in the ratio of

¹⁴J.H. Collins, A Guide to Trinidad, London: 1888, pp. 140-141.

four to one. By 1915, the East Indians outnumbered the Negroes by a small amount.

East Indian Indentureship

With the emancipation of the slaves the shortage of labour became a problem on the West Indian plantations. As an alternative to West Indian slavery colonial planters became interested in obtaining East Indian labour. East Indian immigration into Trinidad, therefore, began in 1845 with the arrival of the first immigrant ship from Calcutta. This importation continued through the latter part of the nineteenth century, was interrupted during 1914, stopped in 1917 and was legally abolished in 1920. During this period some 144,000 "coolies" were brought into the island.¹⁵

The question can be asked about the reasons for the East Indians coming to Trinidad. From interviews of Indians, mostly Trinidad born, it was found that their grandparents were "tricked" into coming, were promised "high wages" and "easy work," two things which never materialized. A few came for adventure, a few because of family conflicts, but most came because food, money and employment were scarce at home.¹⁶

¹⁵ Morton Klass, East Indians in Trinidad, New York: 1961, p. 9.

¹⁶ Ibid., p. 9.

One native born Indian relates his experience,

I was 23 years old. The white man with his Indian aide came to recruit workers. I was married but living very unhappily mainly because of my inability to get a suitable job. Because of the golden opportunities being offered in Trinidad I boarded a ship at Madras unknowing to my family. I have never heard from or of them since. Things were not as "golden" as we were told. We lived in dirty old rooms, worked long hours for meagre wages. My only wish is to return to India some day.¹⁷

Needless to say like many others he never saw India. He died in 1964.

Most of the Indians came from Madras, Calcutta, North-west Provinces, Bihar and Orissa. Contrary to some opinions these included all castes from the highest Brahman to the lowest Chamar - although the lower caste and hence class, comprised the majority of migrants.¹⁸

The East Indian population in Chaguanas started settling around the early part of 1860 after serving their period of indentureship. This was now raised to ten years rather than five years because "after 1850 indentureship was raised to 10 years after which only one half of the immigrants passage to India for a man and two thirds for a woman was to be paid."¹⁹

¹⁷ Pers. Comm., Mr. Rambarran, Chaguanas, 1962.

¹⁸ V. Richards, Notes on Indian Immigration, 1877-78, pp. 3-18.

¹⁹ Trinidad Government, Indian Immigration Regulation of 1845.

This regulation was aimed at suppressing the numbers of migrants who were leaving the plantation and allowing for a more stable labouring population. However, the East Indian had his heart fixed on settlement once his opportunities to return home were taken away from him. He disliked working full time on the plantation. The result was that East Indian settlements began to grow around and in Chaguanas and by 1878 the Trinidad Planters' Association protested against the establishment of Indian Settlements in Chaguanas and Lower Caroni on the ground "that the immigrants have been attracted from the estates on which they were accustomed to labour."²⁰

It can be concluded therefore that once the "coolies" realized that they were "tricked" by "false promises" their immediate aim was to start settlements of their own. Feli-city, St. Charles, Petersfield, Charlieville, Chandernagore, Chaguanas were centres of Indian culture by 1885. As to their numbers, not more than 500 all told, were present.

The Indian being thrifty and less of a saga boy,²¹ than his Negro counterpart could easily afford the ten shillings per acre of land that was supposed to be swampy and of little

²⁰ M.J. Kirpalani, et al., Indian Centenary Review, One Hundred Years of Progress, Port of Spain, 1945, p. 45.

²¹ Trinidad term used to describe a happy go lucky free spending individual.

use. This type of land posed no problems to the East Indian who was skilled in handling such land in his native India. Most of the land was bought outside the boundaries of Chaguanas although many of the buyers came from Chaguanas and it was a customary sight to see the Indian armed with his hoe and cutlass walking three or four miles to his cocoa or cane or rice fields.

By 1890 Morton wrote,²²

I took an early train to Chaguanas. My first duty was to explore the new settlement....A ride through two miles of canefields brought me to a small village on the edge of the savanna. Nearly all the people are East Indians and the greater number of them have bought land upon which they live. The houses are much better than those usually built by the East Indians and there are evident signs of remunerative industry. There are two rum-shops to demoralize the people but no school or church (Presbyterian). One very interesting feature is the rice fields. Imagine over one hundred acres of level land divided into fields.

By 1899 it was reported that there were two schools but the rum shops had increased to four. The population had grown to about 3,000,²³ by 1915.

In Chaguanas the East Indians had decided to settle in little islands wresting a bare subsistence from their own plots, for the plantation system into which they had been

²² Sarah Morton, op. cit., p. 32.

²³ Pers. Comm. Mr. Richards, Chaguanas.

Mr. Richards is over 100 years old and has lived in Chaguanas most of his life.

introduced was not constructed to suit their needs, expectations, experiences or customary patterns of interactions; it had developed during the period when the labour force was made up of Negroes.

Simply stated, the incoming East Indians were required to replace the former slaves in the plantation system - a situation which could not happen. Because of their increasing population, however, they were eager to work on the estate during crop time and the estates were spared of providing for them, with very few exceptions, during the non-crop season.

By 1915 the East Indian population had grown in greater proportion to the Negro mainly because of continued immigration but also because of a higher birth rate and the beginnings of the exodus of Negroes from Chaguanas to the more predominantly Negro areas of Trinidad. These two last reasons are still present today.

Settlement Pattern to 1915.

In Chaguanas the main areas of Negro settlement at this time were St. Thomas and the barracks of Woodford Lodge and Perseverance. It must be remembered that the Negroes who remained in Chaguanas continued, in the main, to work on the plantation and to live in the barracks, using the wages which they earned to buy foodstuff from the East Indian and Chinese

shopkeepers, and fruit crops from the small East Indian farmers. Their place of abode, with few exceptions, was rented. The East Indians on the other hand being more thrifty continued to save and buy land at the expense of their other necessities. The fact of land-holding which is such an integral part of Indian culture was being transferred to Chaguana. The major Indian areas are Caroni Savannah, Montrose, the areas behind the market now called Endeavour Lands and those along the railway line.

The basic pattern of settlement which was found in 1915 is found today. There have been some changes to compensate for population growth. More land has been taken away from cultivation and put into housing; new and better constructed buildings have been erected; new schools, churches, social and governmental centres have been built; roads have been paved; electricity has been installed and a new population group has entered into the picture. The East Indian has continued to be the dominant ethnic group.

Other Ethnic Groups.

Other ethnic groups had been slowly coming into the area. It was the practice of the estate owners to import their managerial and technical staff from the United Kingdom. A small but powerful white elite began to grow up around the

sugar factory. The men were mainly engineers and overseers who tended to congregate in a little white enclave of their own. They formed their exclusive tennis and cricket clubs and had private tutors for their children and Negro or "coolie" yard boys. Once their children became of high school age they were sent off to England to finishing school. It is impossible to estimate their numbers as the years went by but according to one woman who has worked in close contact with them for over forty years there were over 140 within the factory complex.²⁴

Apart from the whites concerned with the immediate factory work, there were the field managers who lived in large white painted houses on the various estates. I remember as a little boy, looking at these with awe and wondering what went on behind those barbed ("tiger" as we called it) wire fences. There were four such houses usually inhabited by bachelors, and a small part of the population of Chaguanas which claims to have "white blood" in its veins has been fathered in such houses.

Such a situation is not unexpected when it must be remembered that there was always the poor East Indian or Negro man with a large family who wanted regular work on the estate

²⁴ Pers. Comm. Person wishing to remain Anonymous, Chaguanas, 1964.

in return for which he had to lend his wife - she also brought home some extra money. There were also vagrant girls plying the "oldest profession in the world."²⁵ An estimate of the white population today stands about 200.

Chinese, Syrian, Portuguese had also begun to move into the area. The Chinese immediately rented and later bought small houses which they used to open food stores and laundries. The Chinese characteristic of giving credit soon made him the favourite shop-keeper, laundryman and money-lender. Their numbers increased because of immigration and high birth-rate and a new coloured group emerged because of their exogamous relationships with Negroes and East Indians. Restaurants, laundries and stores increased in number and today there are twenty Chinese families in town, all of whom are in business, none of whom are in the jobs that they originally came to do, that of indentured coolies on the sugar plantations.

According to Augelli,²⁶ "The Chinese, Syrians and Portuguese represent a very small percentage. The importance of these groups is not in their numbers but in their monopoly of many of the small businesses and few of the larger ones."

²⁵ Ibid.

²⁶ J.P. Augelli, "Race and Population Patterns in Trinidad," AAAG, Vol. 50, No. 2, 1960; p. 134.

In Chaguanas today there are only two Syrian and three Portuguese families. Like the Negroes, once the competition from the East Indians in land-holding and small business became too strong, these smaller ethnic groups tended to move to the city where there was strength in numbers. Of the Portuguese, the Vasconcelos own a small wine factory and soap factory, both of which will most likely be closed within the near future, because of inertia within the industry.

There are mixtures of ethnic groups and nationalities of all types. From questionnaires returned, persons claim to be mixed-Spanish, Spanish, French, German, Jewish, Arabian, mixed-Chinese. In fact just about every nationality was named. But the settlement of Chaguanas centres mainly around a plantation system, a heritage of Negro slavery, the advent of an alien East Indian population which wants to cling to old norms and finally the still apparent domination of a small but powerful white elite.

CHAPTER IV

DEMOGRAPHIC CHARACTERISTICS

The History of Population Growth

From a population of about 3,000 in 1915, Chaguanas grew to an estimated 6,000 in 1931 and by 1964 it was some 14,000.

TABLE II

PERCENT POPULATION GROWTH PER YEAR FOR THREE SELECTED AREAS

	1931-1946 ^a	1946-57 ^b	1957-60 ^c	1960-65	1931-60
Trinidad ^d	2.3	3	3.8	NA	3.4
County of Caroni ^e	1.2	3.1	3.0	NA	3.3
Chaguanas ^f	3.3	2.0	3.0	3.3	3.9

^aCensus of Trinidad, Port of Spain, 1931, 1946.

^bEstimated 1957 figures.

^cEastern Caribbean Census 1960, Port of Spain.

^dIbid.

^eIbid.

^fAll figures for Chaguanas are approximated in collaboration with interviews and by checking records at the County Council and Warden's office.

Between the years 1931 and 1946 the population of Chaguanas grew at a rate of 3.3 per cent per year. This was

much higher than that of Trinidad which averaged 2.3 per cent and that of the County of Caroni which was only 1.2 per cent per year. This growth is surprising when one realizes that Chaguanas is a part of the County of Caroni. However, when one reflects back on the continuing rise in population of the relatively new town with a central location and a productive new land, this growth no longer seems too rapid. Furthermore, Chaguanas at this period was expanding with the increased production in sugar, cacao and the associated rise in the number of service establishments. The town was in fact becoming the capital of central Trinidad overtaking Couva which was growing much more slowly. There was also a movement of persons from other parts of Trinidad to Chaguanas and its environs where land was still relatively cheap, work on the estate and opportunities for operating businesses available.

There was one further incentive to population growth. With the advent of World War II, the Americans leased from the Trinidad Government, Carlsen Field, about two miles south of Chaguanas. Here was opened an American air force base. This afforded work in the building of runways, the erection of staff quarters, the construction of roads and other services. The local people were paid in American dollars and at a much higher rate than the estate owners could have paid. As a result people moved into the area. There were truck

drivers, construction workers, manual labourers, skilled technicians and of course, the usual vagrants. Soon houses were built, standard of living rose and with these the inevitable population growth through natural increase and immigration took place.

The population growth rate of Trinidad at this period was around 2.3 per cent per annum. This relatively small growth was because of the still inadequate medical facilities and a relatively high infant mortality, but also more because the migration of male workers to other air bases throughout the island caused the break-up of family ties during the war period and the relative unemployment in sectors of the economy not directly concerned with the war. There was no operation of factories at nights due to a shortage of imported foodstuffs, parts and improved machinery, and a state of relative "black out." However, the town of Chaguanas realized one of its highest growth rates during this period because the above inadequacies were compensated for by the higher wages and the provision of piped water from the American base at Carleson Field. Medical and service facilities were improved and roads paved.

During the period 1946 to 1957, while the population of the island as a whole increased at the rate of about three per cent per annum and that of the County of Caroni at 3.1 per cent, the rate of Chaguanas dropped to a record low of two per

percent per annum. This was a direct result of the evacuation of the Americans with the end of the War. The "sweet times"¹ of the war period had now gone to be replaced by the "hard times" of the post war period.

Only that part of the population which could return once again to the plantation economy or to peasant farming could subsist. Those persons who had moved into Chaguanas from larger urban areas had to work for Trinidad dollars either on the sugar estates or in the civil service if they had the necessary training and education or they had to leave the area. Many chose the latter alternative. Of those who chose to remain in Chaguanas or its environs, many decided to go into agricultural production in the government sponsored agricultural settlements of Monroe Road and Agostini Village where new lands were opened, allotted and cultivated.

During this period most of the growth in Chaguanas therefore was due to natural increase rather than immigration as in the period before. In fact there was more emigration than incoming population. Of those earlier migrants who remained in Chaguanas some went into the taxi business, a few became mechanics and machine operators on the estate, but most

¹This and all subsequent quotes are direct words of persons interviewed in 1964.

were unskilled labourers working from four to six months in the cane fields and ekeing out a bare living from their small gardens the rest of the year.

Between 1954 and 1957 the level of growth had begun to rise again. This period was marked by the immigration of many Negroes from the islands of Grenada, Carriacou and Bequia. Because of the rise of trade unionism in the island at this time, especially in the sugar lands, the labourers on the estates were making "extreme" demands of the owners.² As a result, Mr. (now Sir) Harold Robinson, then manager of Woodford Lodge Estates Ltd. (now Caroni Estates Limited) began to import Negro labour from the neighbouring islands. These workers besides providing cheap labour, could work long hours under the harshest climatic conditions. Furthermore, these labourers had come from a very poor area and were accustomed to working for even much lower wages than the local labourers were quibbling about. Added to this was the fact that unlike the labourers of Chaguanas, they had no other form of income, and did not belong to the union. They lived on estate property and thus could not even have small backyard gardens. The result was that the labour was provided on the estate, the factory operated at full capacity, and the trade union folded

² Pers. Comm., Estate Overseer, Chaguanas.

because the local labourers began to feel the pangs of hunger caused by their unemployment.

On the other hand, the Trinidad oil fields had once again begun to work at full capacity, local industries were expanding, pioneer industries using foreign capital were being introduced. In short as the Trinidad economy became more elastic and more stable, the island's population began to enjoy a better standard of living. The improvements in the governmental and social services also encouraged such conditions which resulted in an increased growth of population.

This thesis presupposes that an improved standard of living in an underdeveloped country, which Trinidad certainly is, naturally leads in its early stage, to an increasing population growth. With more leisure time, better recreational facilities and other associated amenities and given a period of time, the increasing growth will level off or drop. As far as Trinidad generally and Chaguanas in particular are concerned, this latter stage is far from being attained. Also with improved medical facilities there is a decrease in infant mortality and an increase in longevity thus leading to increased growth.

Between the years 1957 and 1960 the rate of growth in Chaguanas had again gone up to three per cent per annum while that of Trinidad had reached 3.8 per cent. By 1964 in

Chaguanas, this had increased to 3.3 per cent. It is hoped that this increased growth would level off as a result of the efforts being made with family planning.

Whereas the population of the island and the County of Caroni has been increasing rather steadily since 1931, that of Chaguanas has gone in spurts and starts. This is expected. Chaguanas is a small community and any disruption in the local economy has a very significant effect on the pattern of growth. This assumption has been borne out by the changes associated with the aftermath of the war or by the introduction of Negro labour into the community.

As far as the overall population growth is concerned, using the 1931 data as a basis of 100 per cent Chaguanas recorded the highest average per annum growth: (Table III). That of Trinidad was 3.4 per cent and the County of Caroni 2.6%.

TABLE III

TOTAL POPULATION CHANGES FOR SELECTED YEARS AND
AVERAGE PER ANNUM CHANGE IN PER CENT

	1931	1946	1957	1960	1964	
Trinidad	412,783	557,970	742,500	827,957	NA	3.4 (to 1960)
C. of Caroni	51,193	61,739	82,850	90,513	NA	2.6 (to 1960)
Chaguanas	6,000	9,000	11,000	12,000	14,000	3.9 (to 1964)

Today Chaguanas has just over fifteen per cent of the population of County of Caroni and a bit less than two per cent of Trinidad. It is the fifth largest town on the island and the largest in the county of Caroni.

Ethnic Composition

TABLE IV

THE COMPOSITION OF THE POPULATION BY ETHNIC GROUPS
IN PER CENT FOR THREE SELECTED AREAS IN 1960

	East Indians	Negroes	Others
Chaguanas ^a	74.4	19.4	6.2
Ward of Chags.	68.5	22.6	8.
Trinidad.	36.4	43.3	20.3

^a These and all subsequent data unless specified for Chaguanas are 1964 estimates.

The predominant ethnic group in the town is the East Indian. This is easily explained. With the emancipation of the slaves there was a great exodus of Negroes out of the area resulting in a necessity to import labour. The East Indians began arriving on the island in 1845. Their attachment to the land soon caused them, once they had served their indentureship, to buy available land which they later either cultivated or rented to other East Indians. Also East Indians being more communal and gregarious and having come from rural areas of

India, tended to remain in rural areas and Chaguanas was therefore a centre of attraction. This pattern has continued even with recent immigrants.

The Negroes, on the other hand, form only 19.4 per cent of the town's population. These fall into two categories. Firstly, there are those negroes who have lived or whose fore-fathers have lived in the town since its inception. They have worked in the factory, attended the local schools, and bought some land in the town. Secondly, there are those who have recently migrated into the area. These have settled mainly in the factory area and live in the housing units erected by the estate owners.

There is one major factor which has tended to cause the continuing dominance of the East Indians in the community. Once the East Indians had moved into the area, bought land or set up business, the Negroes tended to look on them not as neighbours but as competitors. Personal attitudes arising out of this competition between the two groups have contributed greatly to the dominance of one group and each seems to be suspicious of the other.

Creoles³ tend to regard the East Indians as power-driven, grasping, avaricious, stingy, suspicious and secretive;

³ A Trinidad term used to designate a Negro or any mixture of a Negro and another Trinidadian.

while the East Indian views the Negro as feckless, childish, lazy, vain, wasteful and pompous. These stereotypes and the corresponding self-images do affect behaviour.⁴ This behaviour is manifest to the point of gregariousness, the movement of one group out of the area or the absolute refusal of this group to settle in the area.

The 6.2 per cent comprising the group designated "others," is composed of Chinese, Whites and all types of mixtures. The Chinese form the largest of this group, followed by the White. There is not a large proportion of mixed or "coloured." The main mixtures have resulted from Americans' cohabiting with local women or the abuse of field labourers by white overseers. Recently, however there has been a tendency to mixed marriages or common-law relationships among the Negroes, the East Indians and to a certain extent among the Chinese.

The ethnic composition of the ward of Chaguanas corresponds closely to that of the town. There is the dominance of East Indians with a slight increase in Negroes and others.

For Trinidad as a whole however, forty-three per cent of the population is Negro, thirty-six per cent East Indian and twenty per cent others. The Negroes are found in the

⁴ D. Lowenthal, The West Indian Federation, New York: p. 84.

urban and industrial areas, the mixtures mainly in Port of Spain and San Fernando where mixed marriages have become a norm through assimilation. In these areas and to a lesser extent in Chaguanas the East Indians have tended to become "creolized"⁵ and their mode of life has become much like that of other Trinidadians. This attitude will take much longer to be accepted in the more rural areas where ethnic distinctions are much more rigid and assimilation much less present.

Age Composition

Throughout the island, the ward and the town the 15-64 age group, comprises more than 50 per cent of the population. The following table shows that 53.5 per cent of the population of Trinidad is in this group; 50.1% in the ward and 62.2 per cent in the town.

TABLE V

PERCENTAGE DISTRIBUTION OF THE POPULATION BY AGE GROUP FOR THREE SELECTED AREAS

	Under 15	15-64	65+
Trinidad	42.5	53.5	4.0
Ward of Chaguanas	46.2	50.1	3.7
Chaguanas	36.2	62.2	1.6

⁵A term used to designate characteristics typical of Creole behaviour.

What is most noticeable about the town in relation to the island and the ward is the higher proportion of the population in the 15-64 age group and the smaller proportion in the older group. From analysis it was found that in Chaguanas over thirty-seven per cent of the 15-64 group were under 25 years old. This has resulted from the war and immediate post-war baby boom, for during these times money was easily forthcoming and the resulting times not as hard. The relatively low 1.6% in the above 65 year group is the result of poor medical facilities, inadequate diet, poor health and sanitary conditions, floods, mosquitoes and sub-standard housing.

The following table gives the breakdown for Chaguanas by ethnic groups.

TABLE VI

PERCENTAGE DISTRIBUTION OF POPULATION OF CHAGUANAS
IN AGE GROUPS BY ETHNIC GROUPS

	Under 15	15-64	65+
East Indians	34.9	63.8	1.3
Negroes	31.7	65.5	2.9
Others	59.2	37.1	3.7

In the under fifteen age group "others" has a very high percentage. This is expected when it is remembered that the Chinese have only recently made an economic foot-hold in the

town. Their children are now of school age. This group is also characterized by the children of the recently introduced white personnel of the sugar estate. The 3.7 per cent others in the sixty five age group are many grandparents and parents recently brought in from China or other parts of the island, or older Europeans having a permanent "sunshine" holiday.

In the 15-64 age group the Negroes have the highest proportion but not much higher than the East Indians. East Indian women tend to have children for a longer period of time than the Negro woman, hence the slightly higher 3 per cent in the Under 15 age group. What this means is that an East Indian woman who has a child over 15 years old is more likely to have another baby than is a Negro woman.

So far not many East Indians relative to Negroes live to be over 65 years. One explanation for this is that the East Indians being more thrifty tend to save on the amenities and even the necessities of life, and invest their money in land which as the Negroes claim "they can't eat." "Thus the poor diet in early life cuts short their later years." Indians it is said are "too hard working, ambitious, frugal" while the Negro is "too happy-go lucky."

It is expected that this age composition of the town will change within the next few years. One of the reasons for this assumption is the tendency among East Indians to marry at

a much earlier age than Negroes and to start having children at a much earlier time after marriage than all other ethnic groups. What the changes will be is too much to predict at this time.

Sex Composition

TABLE VII
PER CENT DISTRIBUTION BY SEX FOR
THREE SELECTED AREAS

	Males	Females
Trinidad	49.7	50.3
Ward of Chaguana	50.5	49.5
Town of Chaguana	52.2	47.8

The above table shows that there is a greater percentage of women than men in Trinidad. This difference of only .6 per cent is found in the 65 and over age group, where women outnumber men considerably. The reason is that women generally tend to live longer than men. In the Ward of Chaguana and Chaguana, the men outnumber the women.

In the town the men exceed the women by 4.4 per cent or by over 500 persons. This has resulted from history for during the days of slavery and East Indian immigration men were the chief labourers bargained for.

TABLE VIII

 PER CENT DISTRIBUTION OF MALES AND FEMALES
 BY ETHNIC GROUPS IN CHAGUANAS

	Males	Females
East Indians	50.6	49.4
Negroes	52.9	47.1
Others	55.5	44.5

The greatest difference between males and females is noted in the Others group. Most of the difference lies in the Chinese families where there are more sons than daughters and the production of sons is considered a sign of "manhood." This is part of the Chinese philosophy and tradition. There is not a great difference between the number of male and female East Indians. To East Indians the having of boy children is particularly important for the extension of the family tree and the communal living so inherent to their total happiness. The difference is particularly small because of the East Indians fear of marrying out of their group. Thus, generally, for every East Indian male that is married there is a corresponding East Indian female. The survey revealed only seven exceptions to this general rule.

The Negro on the other hand, marries out of his ethnic

group more often than does the East Indian. He is not intolerant of concubinage or miscegenation. As has been told, "he does not care a damn about what the community thinks of his common law relationship." Perhaps this has a direct relationship to the statement "to be black is to be poor" or as one person said, "I want somebody to lighten my blood."⁶

TABLE IX

NUMBER OF MALE AND FEMALE CHILDREN PER
ETHNIC GROUP IN CHAGUANAS

	Male	%	Female	%
East Indian	1125	(50.8)	1115	(49.2)
Negro	310	(55.3)	250	(44.7)
Others	117	(58.5)	83	(41.5)

As a result you would find many Negro men having wives of another skin colour. The result is that there is not as small a difference between males and females as in the East Indian section, and a fairly large difference as in the "others" group.

An examination of Table IX shows a very close positive relationship as far as distribution of males and females is concerned, both of children and adults. From a small

⁶ Ibid., p. 75.

dominance of male to female in the East Indian group it increases to over seventeen per cent in the other groups. East Indians comprise the greatest number.

Of the seventeen Chinese families interviewed there were 2.2 more boys than girls per family-which makes up over eleven per cent of the total "Other" children and nineteen per cent of the boy's population of Chaguanas in this category.

Generally within each ethnic group the wish is to have more males than females. It is a manifestation of manhood in the male Chinese, a tradition in the East Indian male, and a formality in the male Negro.

Religious Characteristics

As is expected, Chaguanas having nearly seventy per cent East Indian population, is dominantly a non-Christian community. The following table gives the religious characteristics of three selected areas.

In Trinidad the dominant denomination is Roman Catholicism which claims 36.1 per cent of the population. Christians on the whole comprise over seventy per cent of the island's population. This corresponds closely to the sixty-seven per cent non-East Indians living in Trinidad. In Trinidad Christians tend to be non-East Indians, but this does not necessarily mean that all East Indians are not Christians. About three

TABLE X

PERCENTAGE OF POPULATION IN VARIOUS RELIGIOUS DENOMINATIONS

	Trinidad	Ward of Chags	Town of Chags
Anglican	21.1	11.3	8.7
Roman Catholic	36.1	16.8	14.6
Other Christians	13.1	9.6	16.9
Hindus	22.9	48.7	41.8
Moslems	6.0	11.3	13.0
Others	.8	2.3	5.0

per cent of East Indians are Christians, mainly Presbyterians who have been converted by various missionaries sent from Canada to go into the rural districts "bringing Christ to the Coolies."

In Chaguanas the Christianization of the East Indians has taken an even greater proportion than throughout the island. Whereas the East Indian population of the town is nearly seventy-five per cent the non-Christian element comprise only sixty per cent. The remaining fifteen per cent of East Indians is made up mainly of Presbyterians. As was mentioned earlier by 1899 there were already two Canadian Mission Schools in the town and the first government sponsored non-denominational school was built as late as 1937, some forty years after



The Roman Catholic Church in Chaguanas

the Christins had started educating the masses. In Chaguanas, as in other rural parts of Trinidad, many Brahmins became Presbyterian ministers. They, being the recognized leaders of the East Indian sector of the community, were soon followed by the many more lower caste coolies.⁷

Hinduism is still the dominant religion in the town. The Hinduism here is not as deeply entrenched and as vigorously practiced as in other smaller communities.⁸ There is for example no recognized Hindu temple although a decrepit "lean to" is used as a meeting place at times. Besides, at present in the community, there is a vast cleavage between the Sanatani Hindus and the Arya Samajists. They have even succeeded in building separate schools and changing the form of Hindu worship.

The practice of the religion has become something of a farce. Examples of many families can be found in which the parents have been married in a Christian church, have sent their children to the church, yet when asked about their religion claim to be Hindus. Most of them make the excuse that they were married in the church because prior to 1947 marriages

⁷ My mother's great-grand-uncle was one of the first Brahman Presbyterian Ministers in the island.

⁸ M. Klass, East Indians in Trinidad, New York: 1961, pp. 137-183.

performed by non-Christian priests were illegal, and the succeeding offspring bore the mark of "illegitimacy." But today the system still exists and there are no valid excuses as prior to 1947.

All Moslems are also East Indians. They are much more devout than the Hindus but it seems that their church attendance and daily prayers are much more of a fad than a religious discipline.⁹ They are much more cliquish than other groups, never attend another church or marry out of their religion.

Most Negroes are Roman Catholics. According to one informant this is the region which allows them more ritual than any other, an opinion which the informant claims goes back to his African heritage. The Anglicans are mainly of the white or mixed group with a few very devout Negroes. More than ninety per cent of the Chinese are Roman Catholics, but are not very church-going.

The high percentage of "Other Christians" and "Other" is a testimony of the willingness of many of the persons from Chaguanas to be very acceptable to a new religion or new cult. Whether this is a sign of weakness or not cannot be said with any certainty. The "Other" belong to the non-alligned group. This is something quite new, but with the opening of the mind

⁹ Pers. Comm. Muslim Priest, Chaguanas, 1964.

of many youngsters because of education, such a situation is not unexpected. God, to these few, is something intangible and this is too immaterial to be of any value in their very materialistic world.

TABLE XI

RELIGIOUS GROUPS IN CHAGUANAS BY ETHNIC GROUPS

	East Indians	Negroes	Others
Anglicans	1.8	26.3	17.5
Roman Catholics	1.8	42.1	80.5
Other Christians	13.0	31.6	-
Hindus	59.8	-	-
Moslems	18.6	-	-
Other	5.0	-	-

The above table brings out the fact that many newer religions are taking over from Catholicism and Anglicanism among the Negroes. One such religion is the Baptist or the "Shouters" as it is called locally. The loud singing, chantings, "catching the spirit," "getting God," reminds one more of voodooism than Christianity. It is worth noting that among the "Others" and especially with the Chinese such newer religions have no special attraction.

In Chaguanas can be found separate schools, churches of the Roman Catholics, Anglicans, Methodists, Seventh Day

Adventists, Church of God, Baptists, Christ the Saviour, Presbyterian, a Hindu temple, and a Moslem mosque. Many persons claim to believe in God yet belong to no organized church.

Family Size and Structure

The following table gives a breaking down of family size and structure for Chaguanas according to ethnic groups.

TABLE XII

FAMILY SIZE AND STRUCTURE BY ETHNIC GROUPS IN CHAGUANAS

	East Indians	Negroes	Others	Average
Average family size	7.0	5	7	6.5
Average No. of persons per household ^a	8.5	4.5	7.5	8.0
Average No. of children per couple	5.5	4	6	5.0
Average No. of children per married couple	5.5	7	5	5.5

^aHousehold includes the relatives living in the home but not the renters.

The above table shows that both the East Indians and Others have the largest family and the most persons in their home. As for the East Indians this is expected because of their early marriage and the fact that they want more children. Besides, having on the average more available money and not wanting as many "extras" as the Negroes, they are thus

more able to provide the bare necessities of life to their offspring . The East Indian woman has been described as being more prolific than other women. East Indian women over the age of forty-five have had on the average 6.7 children; other Trinidadian women only four children.¹⁰

Among the East Indians the number of children per married couple and per couple is the same. This is because concubinage and extra marital relationships among East Indians do not appear to be present. However, it is known that East Indians tend to be secretive about their outside affairs which are looked upon as dirty and scornful. Hence interviewees tended to lie about their "outside" children. It is estimated that one out of every ten East Indian men has at least one woman outside of marriage and certain instances are known where one man has set up house in two or more different homes. East Indian women too have similar extra-marital relationships and have been known to bear children of men other than their husbands but these children have their husband's name. Thus the same figure appearing under the columns "children per couple" and "children per married couple" is somewhat of a false guide.

¹⁰G.W. Roberts and L. Braithwaite, Fertility Differentials in Trinidad, Vienna, 1959, p. 2.

These two columns show a relatively large difference in the Negro group. The number of children per married couple averages seven, whereas the children per couple average four. The Negroes are not secretive about their other relationships. In fact some of them even tend to boast about their many "wives" and the number of children they have.

Chinese men also have extra-marital relationships. These are mainly with their maids. Chinese wives seem to be oblivious to such behaviour. Indian-Chinese mixtures can be seen on the streets and in 1964 there was noticed an obvious increase in their numbers. Yet these are better off financially than most other children.

The different attitudes among the ethnic groups towards extra marital relationships, concubinage, miscegenation, endogamy and exogamy have been summarized by one social anthropologist,¹¹ as follows:

East Indians appear to be more concerned with social prestige, more fearful of being victimized, readier to sacrifice immediate gratifications for future goals, and more dependent on external approval. When they fail Creoles ascribe their lack of success to their personal inadequacies, whereas East Indians often blame external circumstances - illness or accident. Creoles feel most ashamed when they do something wrong: East Indians when they are caught doing something wrong.

¹¹V. Rubin, "Approaches to the Study of National Characteristics in a Multi-Racial Society," Int. Journ. of Soc. Psychiatry, Vol. V., 1959, pp. 20-26.

According to the Negroes however, they still feel guilty. There is to them the theoretical value of "marriage being the sine qua non of respectability." The extra marital relationship and the resulting children can be blamed to a certain extent on the "Negroes promiscuity."

East Indians families tend to be more closely knit. The father is the head of the family and the sole authority. Children remain home for a longer period of time than in the Negro family. East Indian families are therefore larger for the East Indian male-child on marrying, brings his wife to live with her in-laws. The Negro child on the other hand leaves his home at the age of eighteen or nineteen and accepts the responsibility of adulthood. The Chinese family, like the East Indian's is patriarchal. The Negro family is more matriarchal for many women have to become the head of the home "once the father has left," or "when he is hardly ever at home" or "when he is not even known to the children."

The greater number of persons per house within the East Indian group is because older folks like grand-parents and old aunts are encouraged to stay with the family. They would probably be receiving an old age pension which would help towards the communal pot. They can help in the backyard garden, in taking care of the children or in cleaning and cooking.

To the Negro on the other hand, older folks are a "burden" and are encouraged to leave. A survey of the "Home for the Aged" in Chaguana showed that seventy-two per cent of the occupants were Negroes. As a result the average number of persons per Negro house is even less than the average family size, whereas it is the opposite among the East Indians or Chinese.

Generally the East Indian and Chinese families tend to be communal and patriarchal. The Negro family is broken up easily with each individual trying to be on his own as early as possible.

The negro family system had its origin in the extreme type of society created by the plantation agriculture - the economic system of the East Indians is in many ways similar to that of the Negroes, but their family system is different. This is not merely a matter of cultural persistence. A number of group systems have developed in which males play an important role and there is an Indian system which is distinct from that of the total society. It is apparent that in speaking of the family in the Caribbean we are speaking of a number of varying types.¹²

¹² R.T. Smith, "The Family in the Caribbean," in V. Rubin (ed.) Caribbean Studies, a Symposium, Seattle, 1960, p. 74.

CHAPTER V

THE ECONOMY

Introduction

This section is aimed at interpreting land use and relating it to ownership, size of holdings, historical evolution and potential use of the area. To analyze this adequately it is necessary to introduce the human element and to show what impact it has on the total landscape. Labour productivity and wages therefore are an integral part of the analysis.

(i) Land Holding and Land Ownership

During its formative years Chaguanas depended to a very large extent on the growth and expansion of the plantation system. Today only about twenty per cent of the total area belongs to individual owners. The three large plantations Endeavour Estates, Caroni Estates Limited and Montrose Lands own eighty per cent of the total area.

Practically all lands bounded by the Trinidad Government Railway to the west and the Princess Margaret Highway to the east belong to Endeavour Estates Limited. East of the Princess Margaret Highway is the property of Montrose Lands. Caroni Estates Limited, now a subsidiary of Tate and

Lyle, owns the area of earliest settlement, St. Thomas. Here was the major plantation and the core of Chaguana in the latter half of the nineteenth century. Since then barracks were built, a cemetery located and houses constructed. Much of the land, away from the Main Road is still under sugar cane, but the original mill, ponds and pens have disappeared and have been replaced by schools, churches, clinic and overseers quarters.

The owner of Endeavour Estates Ltd. is Rene de Verteuil whose grandparents settled the area around 1850 planting cocoa and coffee and later coconuts and citrus fruits. Montrose lands belong to Ray Lange. Formerly under cocoa and then sugar cane, part of this is taken up by buildings and the remainder is scrub land.

Land Values

Along every artery, paved or unpaved are buildings of all types. Absolutely no form of zoning has been in effect in the area and as a result the pattern of development although jumbled has many interesting characteristics. Old, broken down adobe types of houses can be seen alongside modern, brick residences, a gold-smith's shop occupies the main floor of a house or even in some cases the sitting room of a small shack.

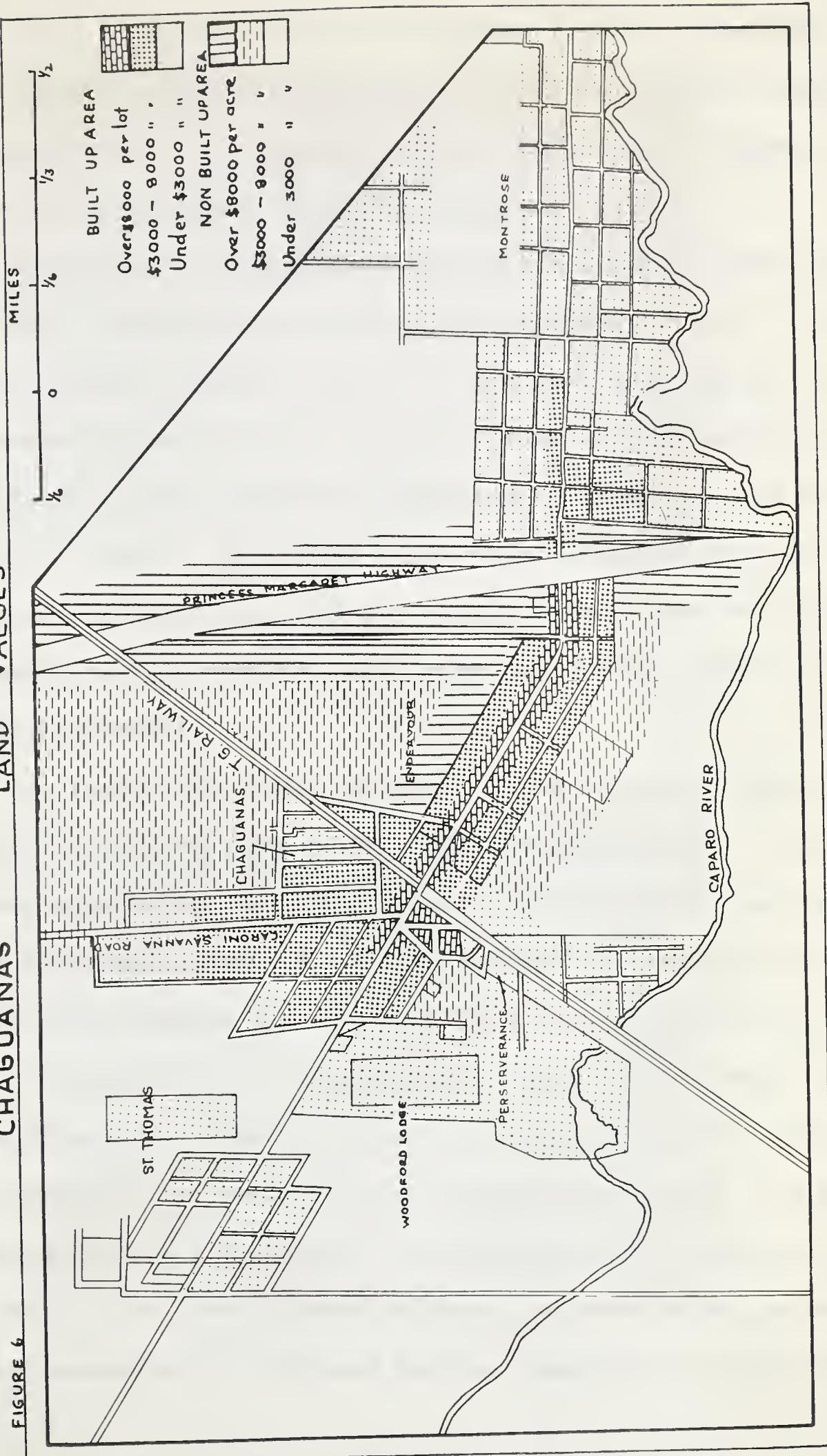
Of the built up area about fifty per cent is owned by the small individual. The survey showed that plantation owners in the past were very reluctant to sell land to individuals and consequently persons with enough capital to erect buildings had to rent from the land magnates. To many this was a satisfactory condition when money was not available for the purchase of land. To the plantation owners this was a situation which provided very little benefits for rent was very low.

With increased wages and better jobs and working conditions in the 1940's money was more forthcoming and as a result demand for land increased. The plantations though still reluctant to sell land saw an opportunity for making a fair profit. In areas not immediately adjacent to or within the shopping area, land was sold at forty cents to twenty-five cents per square foot. The more expensive lots were nearer the core, the values decreasing with increased distance from it. The Survey showed that on the eastern side of the Caroni Savanah lots of fifty feet of road frontage and 100 feet long ranged from \$2,000 to \$1,250.¹ These lots were offered for sale to persons who were renting them and had a building on

¹All money values are in Trinidad dollars. \$1.00 (Tri) \$.625 (Can.)

FIGURE 6

CHAGUANAS LAND VALUES



them. Only forty per cent of the rented land was sold, the other renters continuing to pay rent to the plantation owner, Endeavour Estates Ltd. Caroni Estates Ltd. also followed a similar pattern and not many lots have been sold.

Generally it seems that persons are willing to pay what they claim is an exorbitant price for residential land. Those who have bought land say that it is the only way they can make improvements like filling to prevent flooding, or paving and fencing, as it was particularly foolish to improve lands belonging to others. The whole point that is missed is that persons in the area have not yet realized that land values are increasing rapidly and buying of such lands will prove a profitable investment.

On lands within and adjacent to the shopping area an even more expensive form of land disposal took place. After the Chaguanas market was built it was realized that the core of the shopping district which was formerly at the junction of the Caroni Savanah and the Main Roads was shifting eastwards. Endeavour Estate Ltd., quickly realized the importance of its property. Cocoa and sugar cane lands along the Main Road between the Princess Margaret Highway and Caroni Savanah Road were quickly cleared and parcelled into fifty foot by one hundred foot lots. These were put for auction which was not for possession of the land but for permission to rent the



View of the Main Shopping Area



Modern Commercial-Residential Building



land for both residential and commercial purposes. This was, therefore, a down-payment for renting lots. This was possible because of the rapid rise in the land value. In 1964 it was found that a lot which in 1952 had a down payment value of \$2,000 had been passed over to another person for \$30,000 an increase in value of \$28,000 or 1400%. The survey further showed that increases within the shopping district ranged from 800% to 2500%.

Nowhere in the area has residential land decreased in value. Outside the shopping district values between 1952 and 1964 rose from forty-eight per cent to as much as 200%. Where land can be bought prices have jumped, and there is very little to be bought. Highest values are at the core of the shopping area where a lot if worth over \$30,000. Values decrease in all directions from this center.

The least expensive area is around St. Thomas and the north end along the Caroni Savanah Road where lots are valued at \$2,000. Values decrease much more West and North from the core than eastwards along the Main Road. Non built up areas average about \$1,000 per acre but this is expected to rise 100 per cent within the next five years.²

²Pers. Comm. Overseer of Endeavour Estate Ltd. Chaguanas.

Land Owned outside Chaguanas

Despite the fact that a small proportion of the population own land in Chaguanas, there are many persons who have property outside of the area.

Historically they have not been able to buy land here either because of the reluctance of the plantation owners to sell land which they had cultivated, or because of the lack of capital on the part of the individual to purchase such land. Secondly, when money was available it was realized that land of equal agricultural potential was much cheaper outside the populated or plantation owned areas. This was when the economy was more strongly agricultural based than it is today. As a result it seemed much more feasible to pay cheaper prices for land outside the area and to pay a rental fee for land upon which to reside.

The largest peasant landowner in Chaguanas has forty-five acres and more than five per cent of the peasant landowners have over two acres. All the land is agriculturally used in the production of sugar cane, coffee, cocoa, citrus fruits, bananas, rice and market garden crops.

Most of the land is owned by East Indians. Not only because of the reluctance of the plantation owners to sell his land, but because of the greater quantity of land that could be bought outside Chaguanas, East Indians felt that there was

security in large holdings regardless of the value of the land, a fact which is very fundamental in understanding the geography of the area.

Land Ownership by Ethnic Groups

TABLE XIII

INDIVIDUAL LAND OWNERSHIP OF THE CHAGUANAS
POPULATION BY ETHNIC GROUPS

	Negro	East Indian	Other
Average Land Owned (Lots)	8.1	22.3	3
Largest peasant owner (acres)	10	45	12
Per cent of peasant farms of 2 acres	3	7	2
Per cent of persons owning land on which house is situated	42	34	60

The above table shows that the East Indians are the largest owners of land both in total amount and average acreage of land. This is because East Indians were able to save much more money and thus put it into cheaper land outside the town. This is borne out by the fact that while only thirty-four per cent of the East Indian house owners own the land on which their house is situated, among the Negroes this is forty-two per cent. This means that Negroes are much more

concerned with owning land in town and maintaining such land rather than investing in agricultural land. Furthermore, the prestige element comes into play for the better kept the home is, the more social security is involved. With the increased selling of land in the area during the last decade Negro ownership of land greatly increased.

The East Indians on the other hand, being much more agriculturally inclined and having a greater attachment to the land, especially large tracts, would invest their money in it. To them land ownership is both a business enterprise and a cultural heritage, and with increased growth of population not only does the land grow in value because of pressure on the land for both agricultural and residential uses, but it increases the social prestige attached to its ownership.

The other ethnic groups are mainly concerned with owning small lots in town hence their small average size ownership but their high percentage of land owned on which their house is situated. The land is bought to establish commercial-residential buildings or small domestic industries and to make whatever improvements to the buildings that are necessary without too much interferences. The only peasant owner in this group with a substantial amount of land had a twelve acre sugar cane field.

Generally in the area land is too expensive to be

bought. Persons who have been long established here have inherited some land or bought some when it was relatively cheap. Apart from the three large plantations, there is no large owner of Chaguanas land.

(ii) Land Use

By land use is meant the dominant and existing form of land occupancy in the area. This takes into account the distribution of buildings, their uses, the number of existing buildings, the amenities provided to them and an evaluation of whether this use is best potentially. For agricultural land use the crops grown and the methods of planting, maintenance and harvesting of the crops are examined. Finally an attempt at the historical evaluation of land occupancy would be made and the changes in land use examined.

Land Use in The Area

From the following table it is evident that the dominant land use is agriculture. There are two major agricultural plantations, Caroni Estates Limited and Endeavour Estates which plant chiefly sugar canes and coconut respectively. The scrubland belongs to Montrose Lands, formerly the most prosperous cocoa plantation in the area. Abandonment and clearing of cocoa trees have taken place because of soil depletion and

FIGURE 7
CHAGUANAS LAND USE

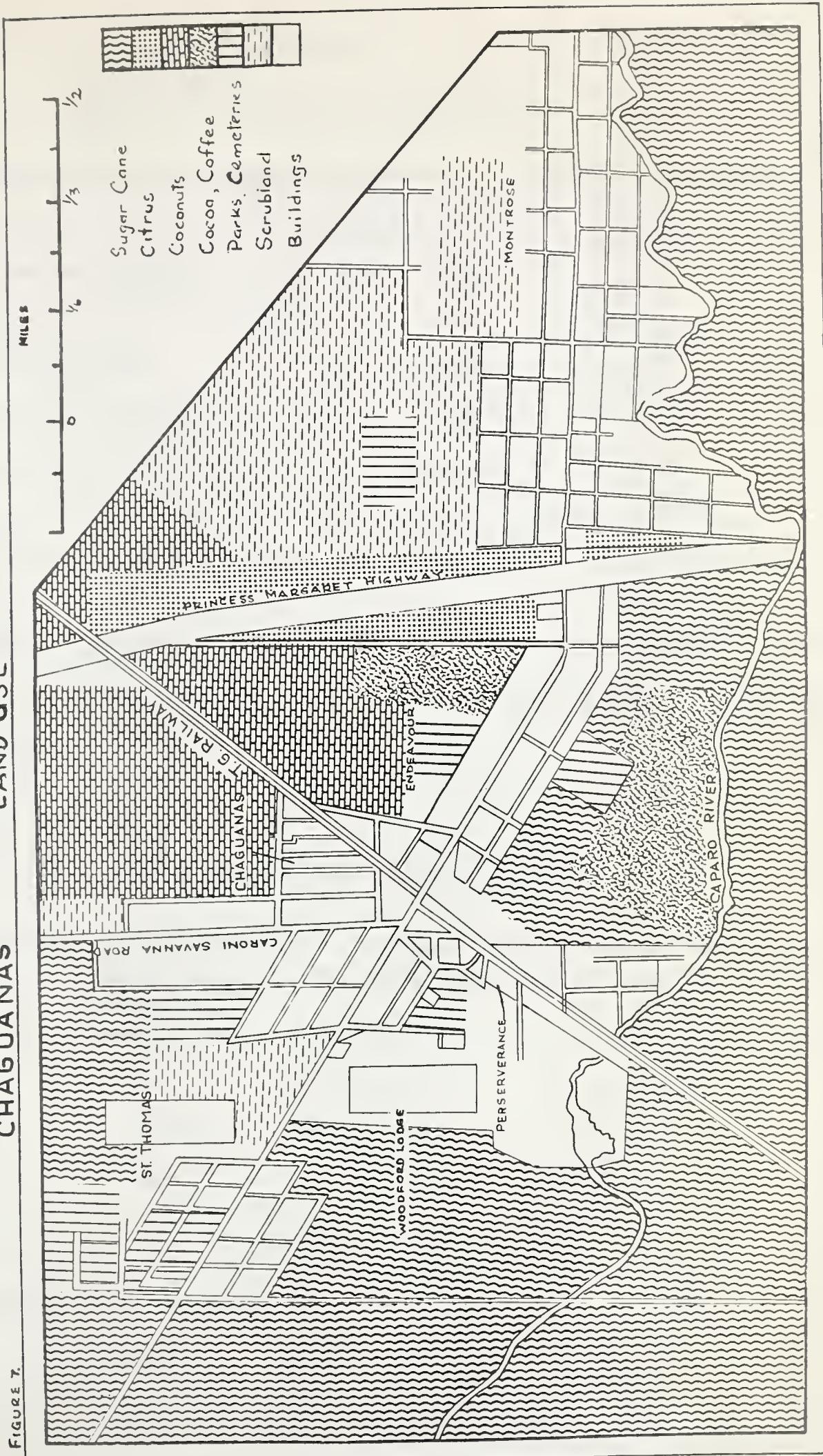


TABLE XIV
EXISTING LAND USE OF CHAGUANAS

	Size in Acres	% of Area
Area under buildings (50% or more of lot used)	400	26
Agricultural Land	960	60
Parks, Road, Cemetery	140	9
Scrubland	100	5
TOTAL	1,500	100

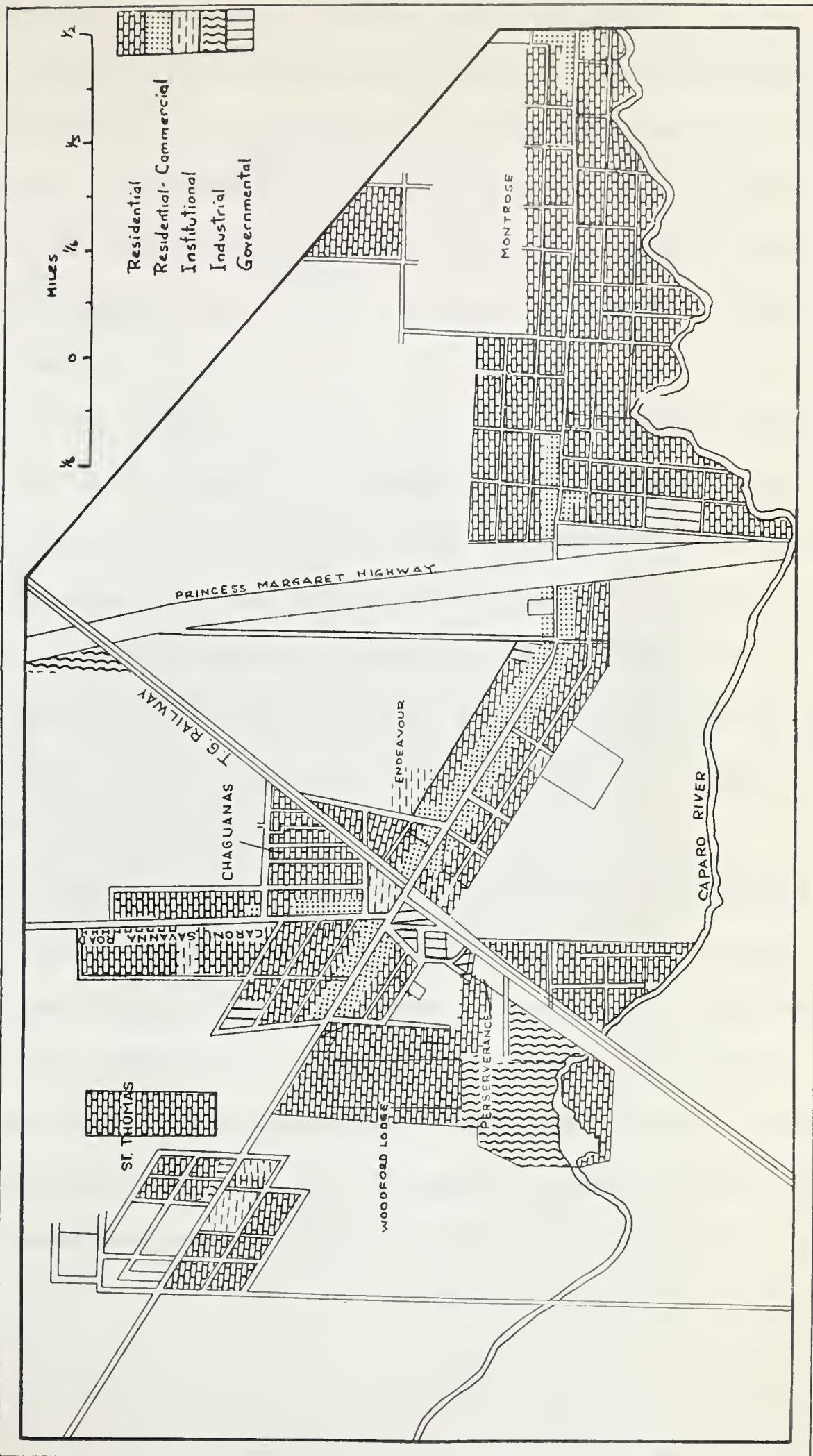
falling cocoa prices. Twenty-six per cent of the land is covered by buildings and nine per cent is under parks, roads and cemeteries.

TABLE XV
PER CENT OF BUILDINGS IN SUBDIVISIONS

	Total No. of Building	% Res	Res-Com	Inst	Ind	Govt	Oth.
St. Thomas	115	89	4	2	1	-	4
W/Ford Lodge	45	89	-	-	11	-	-
Chaguana	325	83	10	3	-	2	2
Endeavour Estates	145	63	29	4	-	3	1
Caroni Savannah	111	92	5	3	-	-	-
Montrose	520	95	4	1	-	-	-
TOTAL	1,261	87	9	1.8	.4	.8	1.0

Figure 8

CHAGUANAS USE OF BUILDINGS



For purposes of discussion the area under consideration is divided into six sub-divisions (Table XV). The names used for these subdivisions are historically correct and today are still used locally. For example, St. Thomas refers to the original plantation by that name and today is the school area. Caroni Savannah is the northern section of the town along the Caroni Savannah Road.

The area under buildings, i.e. where fifty per cent or more of the lot is used up by construction is 400 acres or twenty-six per cent of the total area. There are 1,261 buildings in the area of which 520 are in Montrose, the largest subdivision. Eighty-seven per cent of the buildings are strictly residential, nine per cent commercial-residential and the remaining four per cent used for institutional, industrial and governmental purposes.

The dominance of residential buildings is explained by the agricultural orientation of the economy both in the past and to a very large extent at present. Chaguanas is also the centre of the agricultural economy of the county of Caroni, hence people can live here and work away from the area. Also being within easy reach of Port of Spain and San Fernando, one can live here and commute easily to these two large urban areas.



The Caroni Limited Sugar Factory
in Chaguanas

The largest residential buildings are the barracks of Woodford Lodge and St. Thomas. These are plantation owned barracks and are to a certain extent historical relics. It is not uncommon to see families of six or eight in one room. Sanitary facilities are poor and diseases prevalent. Most of the occupants work on the plantation and hence are in the lowest wage brackets. Recently, there has been a movement to improve the living conditions here, but the improvements carried out are still very outdated. The walls of the buildings are of galvanized iron sheets which become intensely hot during the day, but are relatively comfortable at night.

There has also been a tendency on the part of the plantation owners to lend money to their workers with which to build small homes on plantation land. Not many persons have accepted because of high rate charges. The result is that the barracks are the area where lower class Negroes and East Indians live, where families are large, and where mixed marriage and mixed offsprings are most found. This has been true also in the past.

Away from the barracks and into the factory and shopping areas are found buildings in a much better state of repair and much more sturdily constructed. Walls are of bricks and well painted, the roofs are of galvanized iron sheets with a panelling inside and the whole structure is on stilts. Many

reasons have been advanced for stilts among which are safety against burglars, snakes and other insects, an escape from flood waters during the rainy season and from the damp ground. These buildings also provide space for further expansion for some commercial use or for storage of foodstuffs or as a makeshift garage. More than fifty per cent of all structures are of this kind.

Because of the relatively low wages received in the area buildings are not very expensive. More than seventy-five per cent are valued at less than \$4,000 and forty-five per cent are valued at less than \$1,500. Unlike the pre-World War II era adobe type buildings are very few and in some areas are completely non-existent. In Chaguanas subdivision there cannot be found one such building where as twenty years ago there were quite a few.

Montrose is by far the most residential area, this being an area of poorer, older, poorly constructed houses, and one which has been settled for a number of years. The newest part and the one with the most expensive buildings is the Endeavour Estate area where more than ten per cent of the buildings are worth over \$15,000 and no building is valued at less than \$7,000.

The shopping area stretches along the Main Road from 100 yards west of the junction of the Main Road and the Caroni



Public School in Chaguanas



High School in Chaguanas

Savannah Road to the Princess Margaret Highway. Along this one half mile stretch are seventy-five per cent of the commercial-residential buildings of the area. These buildings are classed as commercial-residential because with the exception of the two gasoline stations and the cinema, no building is completely commercial or residential. Instead in each building the main floor serves the commercial function and the top floor the residential. All the buildings are of two floors.

Of these buildings there are nine groceries, three restaurants, two gasoline stations, one cinema, two furniture stores and over fifty department stores. The small numbers of the groceries as compared to the large number of department stores is explained by the fact that the Chaguanas market serves many of the functions normally done by groceries. In the market can be bought all the vegetables, root crops, grains and meat ordinarily sold in a grocery store. The groceries deal mainly in imported foodstuffs, dry goods and processed goods such as flour, sugar, oil and split peas to name a few. On the other hand department stores are numerous because of the great attraction Chaguanas has as a shopping town. The 1964 survey showed that over 40,000 persons come to Chaguanas every week-end for the purpose of shopping. Locally made and imported jewellery, shirts, shoes, and raw cloth are the chief purchases. There are no specialty stores and each store

carries some line of fairly acceptable quality.

The largest store has an area of 4,000 square feet and it is not uncommon to find 200 square feet being used for the sale of miscellaneous numbers of articles.

Along the Main Road and the Caroni Savannah Road it is not uncommon to find smaller stores carrying dry goods, food-stuffs, hardware and even foods that can be eaten on the spot. The stores or "parlours" as they are called locally serve the same purpose as a small corner store does on the North American continent. These are more for expedience and convenience than for serving the prime function of a permanent shopping outlet to the buyer. Generally such a store is looked after by the resident or some member of his family and there is no paid employee. Many such stores use up surplus space in a residence.

The only major industry is found in the Woodford Lodge subdivision. This is the sugar factory. Here all the sugar cane within a six mile radius are brought to be ground, the juice extracted and converted into sugar. The total number of buildings is six, occupying an area of over twenty acres. The buildings include the main factory, offices, maintenance and storage facilities, the tractor shed and water-pumping station.

In St. Thomas is found a combined soap and wine factory while in Chaguanas subdivision one major furniture operation

functions. Many small jewellers shops are dotted over the whole area, each one using just a very small part of a residence.

The institutional buildings include eight churches, three public schools, six high schools, a Home for the Aged, and medical offices. Among the governmental buildings are the Warden's office, the Magistrate's Court, the County Council's Office and the offices of the Department of Development and Welfare. In the category of other uses are found barber salons, the abattoir and small cottage industries like baking, etc.

Chaguanas is basically a residential agglomeration. The pattern of building usage is gradually changing especially with the realization that the area is the commercial centre of central Trinidad. More capital is being channelled into the area, buildings erected and businesses opened. This trend is further encouraged by the provision of electricity to all buildings in the town, by the better drainage facilities to ease the problem of floods especially along the main road, and especially by the realization of city shoppers that Chaguanas can provide the same goods at prices comparable to or in some cases cheaper than that offered by stores located in Port of Spain and San Fernando. Competition among businessmen is very keen and because of the absence of any body for the setting of

standard prices on goods, undercutting of prices especially among firms with the necessary capital is going on apace. This for the buyer is welcomed, for he is now able to buy at a much cheaper price than before.

(iii) Agricultural Land Use

The major crops grown are sugar cane, coconuts, cocoa, coffee, citrus fruits and market garden crops. In many residential areas corn, peas, root crops, and vegetables are grown in the backyard. These would be mainly for home use and very little is sold at the market. About fifteen per cent of the residents have a garden of this kind.

Sugar Cane

Sugar cane is the dominant crop in the Chaguanas Plain and covers over 500 acres of the area. Caroni Estates Limited cultivates over ninety-five per cent of this crop. The remaining five per cent is cultivated by peasant farmers, cultivators who grow the crops but do not own the mill. All the canes are ground at the factory in Chaguanas.

Historically sugar cane has always been important in the economy of the area for it was the plantation system based on a sugar economy which started this settlement. Cocoa soon followed sugar cane and competition for land went on through

the second half of the nineteenth century but sugar cane soon dominated and continued its upward trend in importance, while cocoa stagnated and was replaced in many cases by sugar cane. Also sugar cane produced capital in one year's growth and so shift to this crop brought immediate financial returns in contrast to cocoa which produces after three to five years.

The methods of cultivation used by the plantation departs widely from those used by the peasant farmers. This is so for two major reasons. Caroni Limited, being the largest sugar corporation, has available the necessary capital to mechanize the industry. In 1953 there were one hundred and eighteen pieces of mechanical equipment for use in the preparation of the fields and in the planting, cleaning and harvesting of the canes. These included truck tractors, trailers, cranes, loaders, rotary hoes and bulldozers. By 1964 over two hundred and fifty pieces of equipment including four aircrafts used in spraying the blight infested canes and for general supervision of the whole plantation were found.

In contrast, throughout the Ward can be found only about twenty pieces of equipment belonging to peasant farmers. These include rotary hoes, farmalls and one truck tractor. Hand labour is the dominant form of operation and the use of oxen and water buffalo drawn carts for the transportation of the machete reaped canes can be noted everywhere.

In the cultivation methods there are also noticeable differences. Instead of weeding, the plantation sprays oil to get rid of the weeds. Fertilizer is applied partly by hand and there is the increasing trend towards the use of aircraft for this purpose. The shift to mechanization even in the harvesting of the canes is going on apace. The implications of this trend will be discussed in the following chapter.

All equipment is fully maintained by the estate garage and workshops. The heavy machines and cranes are serviced daily by means of Fecalamet equipment which is mounted on a truck and visits each machine in the field where the work is being done thus reducing interference with operations to a minimum.

Caroni Limited is closely tied to the individual small farmer who forms an integral part of the industry in the County. The cane farmer and the factory are interdependent; the latter cannot work to capacity without the cane being supplied by the farmer whose cane grown outside of Chaguanas has no value unless it is accepted by the factory for grinding.

In order to maintain close contact and cooperation with the peasant farmer Caroni Limited has a Cane Farmers Department consisting of a Farmers Superintendent, several overlookers who maintain contact in the field with the farmers and the requisite office staff. The functions of the department

includes advice to the farmers on cultivation problems, the ploughing and harrowing of the land, the supply of some planting material, arrangements for the supply and delivery of fertilizers and requesting of reaping operations. The farmers, when they are not working on their own land, provide labour on the plantation in the cultivation, maintenance and harvesting of the canes.

Planting of a new field begins in May or June. At this time the land is fairly moist, not too dry to allow for drying of the plants, not too wet to allow rotting. Bundles of canes are dumped at the end of each bed, are spread lengthways in furrows and quickly covered by machine. After about a month the canes have grown to about twelve to eighteen inches in height. The weeds are sprayed with a weed-killer and fertilizer is applied to the canes. Spraying and fertilizing are repeated after two months, drains are cleared to allow for drainage of all stagnant water, and after the application of pen manure the canes are left to grow. The dry leaves are taken off the plants in January and harvesting of the canes begins in April or May. The canes are burnt of their excess stalk, cut by machines or gangs of workers with machetes, packed in carts and taken to the company owned railroad to be transported to the factory.

Average production on the Caroni Limited land is forty-

five tons of sugar cane per acre while on the farmer's land it is thirty tons. This is because of inefficient operation, poor management, small holdings, lack of capital, equipment and fertilization on the part of the peasant farmer.

Except on peasant holdings of over twenty acres mono-culture is rarely practiced. In their fields in addition to sugar cane are found sweet potatoes, cassava, yams and other root crops, vegetables and lentils which provide food for home consumption and a surplus for sale at the market. The weeds taken off the land is used for fodder for the cattle. One cane farmer states that cane is a subsidiary crop on his ten acre holding. This is not the case on the plantation where mono-culture is vital to the efficient operation of the factory and the realization profits.

Citrus

Citrus plantations cover about sixty-five acres of land along both sides of the Princess Margaret Highway. The fields which belong to Endeavour Estates Limited have been planted about thirty years ago. These have replaced a poor yielding cocoa plantation which necessitated too much labour for efficient production. With the opening up of the Citrus Growers Association canning plant in Port of Spain a market was found for the citrus products and new plantations have



Mature Citrus Trees on Endeavour Estate



Coconut Palms on Endeavour Estate

been opened up throughout the Ward of Chaguanas. Formerly markets were only local.

Orange trees are planted about sixteen feet apart and grapefruit about twenty feet apart. After planting, the weeds are cleaned out and the trees fertilized annually, and the trees pruned every two years. It costs about \$200 to culture, fertilize and prune an acre of citrus which yields about \$800 worth of fruit annually. Trees begin producing about three years after planting. A mature orange tree produces about 1,200 fruits annually. Each acre contains about 200 trees.

Harvesting of the fruits is done by hand, the men climbing the trees to pick the fruits. These are packed in crates which hold on the average 200 fruits. Each tree produces six crates for the first ten years of production and three crates for the next twenty years after which production drops off rapidly. Total harvesting and transportation costs is about \$400 per acre.

One problem facing the industry at present is the restrictive quota being placed on production. Also trees are at the stage of poor production and therefore it would not be surprising if before long this plantation is cleared to make provision for industrial and residential use. Competition from other producing areas has also tended to prevent re-planting of less productive fields.

Coconuts

Coconuts are a problem crop. Throughout the ward there has been a constant decrease in its importance and Endeavour Estates Limited is the only plantation in County Caroni operating profitably. It was found that it was more profitable to put these lands into residential use, or in citrus fruits or sugar cane. Chaguana fields could not produce as well as the fields of eastern and southern Trinidad. Other problems include too much human pilfering of the unripe nuts and the susceptibility of the trees in the area to diseases.

Endeavour Estate has about 200 acres under cultivation. Each acre produces 5,000 nuts from three pickings annually. There are eight-four trees to an acre and copra yield is one half pound per nut. This is sold to the West Indian Oil Industries Champ Fleurs to be made into oil, margarine, soap and lard. The copra residue makes fine feed for animals and the husk is excellent fuel for cooking and baking.

No agricultural machinery is used on the estate, all of the work of maintenance of the plantation and harvesting of the nuts being done by hand. There are five mules and four horses used in pulling the carts for transportation of the nuts. Sulphate of Ammonia is applied to the trees annually, each tree requiring about half a pound.

Recently, because of the building of the Princess



Mixed Cocoa, Coffee and Banana Field

Margaret Highway through the plantation and adjacent to the Caroni Savannah Road, coconut fields have been cleared for residential and industrial uses. This land is sold at twenty-five cents per square foot which means that an acre of land is valued at over \$10,000. The estate owner thinks that selling this land is a highly profitable business and as a result he is continuing to clear his fields. He has no costs for the provision of roads, water, electricity or any other amenities.

Cocoa and Coffee

The two small cocoa and coffee fields owned by Endeavour Estates are in the stage of abandonment. For a long while production has been dropping and the land is being taken over by residences. Whatever little crop is produced is sold to the Cocoa Board in Port of Spain. Large immortelle trees provide the main shade but recently bananas have served this purpose and have partly replaced cocoa trees. The total area under cocoa and coffee is about fifty acres.

Scrubland

The northern part of Montrose Lands is covered by a scrub vegetation of stunted trees and patches of grasses. Formerly a cocoa plantation, then an area of peasant farms of sugar cane and root and vegetable crops, it was found to be

land that became very hard and unmanageable during the dry season. Complete abandonment to scrub therefore followed.

With increased population growth and the subsequent increased value of residential land, this area is the next one of prospective residential incursion. The owner at present refuses to sell his land or to use it. In the meantime because of the absence of piped water, paved roads and electricity, only a small playground exists and goats and cows, horses and mules can be found grazing on the stubble.

(iv) Land Use of the Chaguanas-Population owning land outside Chaguanas

As was stated earlier many persons living in Chaguanas own land outside the area. An analysis of the use of such land is important in understanding the settlement of the area. The largest peasant land holder has forty-five acres but over four per cent of the land owners have land of over twenty acres outside the area. The dominant crops are cane, rice and market garden crops. Sugar cane has been already discussed.

Rice

The Cacandee Clay belt provides the best type of soil for the cultivation of rice. This soil is alluvial with a clay base at one and a half to two feet below the surface, a characteristic necessary for the retention of a high water

table. The main areas of rice concentration are Felicity and Charlieville where the land is mainly less than twenty-five feet elevation and the drainage is impeded. Also, these areas are populated by only East Indians and it is understandable why rice predominates. A combination of the physical requirements of the best type and a culture whose history has been closely associated with this crop precludes any other major form of agriculture.

In late May the fields are ploughed by oxen-drawn steel ploughs or more lately by rotary-hoes. With the first heavy showers, banks called "marees" are made about two feet high around plots of forty to sixty yards square. The rice seeds are sown in a small plot or nursery. All weeds and small plants are cleared off and the land flooded to about one foot deep. The land is then levelled by a bullock drawn heavy plank. This process is called "hengaway." The land is ready for planting.

After about two weeks the nursery plants are ready for planting, which begins in mid-June. At intervals of three weeks after planting, the land is cleared of its weeds. Too much water in the fields causes melting of the plants and too little causes some to die. Therefore, the farmers major problem is keeping a constant supply of water. The Trinidad Government has helped in this respect by an irrigation programme



East Indians Planting Rice



Mr. Punga's Egg Plant Field

1. *Constitutive*

2. *Regulatory*

aimed at both flood control and water provision in periods of deficiency. By mid-September or early October the crop is ready to be reaped. Harvesting is done by cutting the stalk with a curved grass-knife. The cut stalks are stacked in heaps and then beaten over a table or "machan," the grains falling on a tarpaulin or "paal," while the stalks remain in the hands of the beater.

Yields average 3,000 pounds per acre and rice is sold at sixteen cents per pound. This means that in a period of about four months an acre of land produces about \$480 worth of food. Total costs for the maintenance of such land averages \$200 per acre.

After harvest, the mareas are cut and the land left to be drained of its excess water. Water buffaloes, cows, goats, and sheep are allowed to graze on the rice stalks and short grass. By January these lands are completely dry and small sections are boken up by the rotary hoe. These lands are then used for market garden crops until the rainy season begins.

Market Gardening

On market gardens the major crops grown are egg plants, water melons, pumpkins, tomatoes and cucumbers. Small plots are planted in hot peppers, corn, peas and root crops. The largest market gardner cultivates five acres. However,

fifteen per cent of the population has a backyard garden and one per cent depends on this activity for its livelihood.

Mr. Punga's* garden, five acres in area, is situated about one mile south of the sugar factory on alluvial soils similar to that used for sugar cane cultivation. This garden seems misplaced for all around it are the cane fields of Caroni Estate Limited. A small stream, a branch of the Caparo River passes through the centre of his land. He claims that floods caused by this stream, though destructive to his crops, are important in rejuvenating the soil.

The methods used in preparing the soil for planting are similar to those used for sugar cane cultivation. The land is ploughed, chipped and drained. Total preparation costs \$250.

Egg plants are planted in January and are watered three times per day during the first week of growth. To provide water during the dry season a pump costing \$1,400 is installed in the river and used to pump water to the fields. "Moulding" by the use of a hoe is done three days after planting. Two other "mouldings" follow at intervals of three weeks. The plants begin producing in March.

Average yield per acre is 2,000 lbs. per week. Once

* Formerly a labourer on Caroni Limited Estates, he turned to market gardening ten years ago and claims that he has amassed as much as \$50,000 during this period.

the rains begin to fall heavily the plants lose their flowers and production decreases. At the height of production the vegetable is sold at three or four cents per pound, while in June or July the price is as much as sixteen cents per pound. Egg plant is an annual plant and the total area covered by the crop in this garden is one acre.

The pumpkin plot covers two acres. There are about 180 plants per acre. Planting begins in May and production in September. Each acre provides about 20,000 pounds of vegetables which are sold at eight cents per pound.

The tomato plot covers one acre. May is the best time for planting. The soil must be finely chipped to allow for good percolation of water as excess moisture at the roots can be very damaging to the plant. There are about 5,000 plants per acre. Forty-five to sixty days after planting harvesting begins and vines average two pounds of vegetable. Price ranges from six cents to fifty cents per pound depending on the amount available at the Chaguana market.

The remaining one acre plot is used for an assortment of root crops including yams, cassava, and eddoes and vegetables like corn, cucumbers, green peas and hot peppers. These are mainly for domestic use and for distribution to neighbours; only surplus production is sold at the market.

Mr. Punga says that he averages about \$14,000 annually

from his five acre plot which produces 75,000 lbs. of food-stuff. His total costs are about \$7,000 which includes the price of fertilizer, machinery and payment to labourers. He claims that he and his family cannot work a five acre plot adequately and has to employ two permanent workers. He himself works every day of the year, ten hours per day.

This is an example of a highly intensive form of agriculture. There are only two other market gardeners who are comparably successful. All the others carry on a more extensive subsistence type of farming because of the lack of capital, equipment and markets for sale of the products.

Generally, it seems that market gardening is a very lucrative business. One of the major drawbacks in Chaguanas is the attitude of the population towards the amount and regularity of work which this operation requires. There lacks here that determination and indeed even that self-discipline necessary to undertake such a venture. Mr. Punga is an exception in the area.

(v) Labour Force

The following table shows that both in the Ward of Chaguanas and in Chaguanas unskilled labour forms over 50% of the total labour force, whereas, for Trinidad as a whole, the amount is much less. In fact in Trinidad skilled labour is

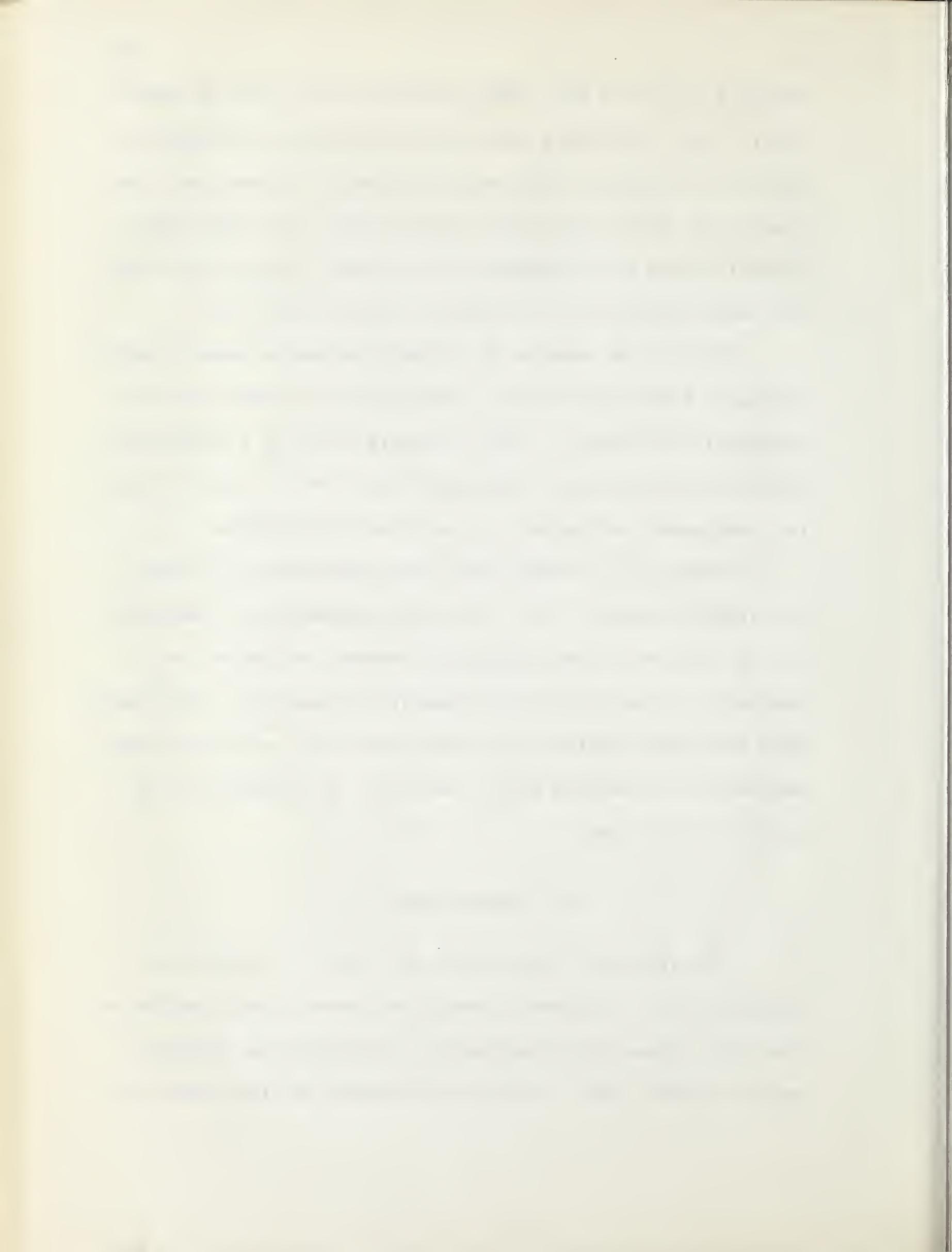


TABLE XVI
PER CENT OF LABOUR FORCE BY MAJOR WORKING CLASS

	Trinidad	Ward of Chaguanas	Chaguanas
Professional	5.8	3.6	8.4
Services	10.7	5.3	13.6
Skilled	28.5	23.7	17.0
Unskilled	29.6	50.9	56.4
Unemployed	9.5	8.4	3.2
Others	15.9	9.3	1.4

just one per cent less than unskilled which is 29.6%. The reason for this is that agriculture is the major employer in the Ward and in Chaguanas. Little skill is necessary in the cutting of canes or harvesting of rice. Also Chaguanas is the largest concentrated settlement and many persons are employed in road cleaning and taking care of parks and cemeteries. Another reason for the apparent gap is that in Chaguanas many skilled persons like carpenters or tailors claim to spend more time in gardening and wish to be called gardeners.

The relatively high percentage in the services attests to the important commercial and governmental functions that Chaguanas perform. Here are the Warden's office, the County Council's office and Medical Services which employ clerks,

stenographers and other office workers.

On week ends, especially Saturdays, Chaguanas is a bee-hive of activity. It is estimated that more than 40,000 persons do some form of shopping here. Maids and domestic help also make up a large part of the service sector of the labour force. Recently side walk vendors or peddlars dealing in dry goods have outnumbered the total personnel in department stores. This last fact has greatly increased the ratio of persons presently involved in services to that of five years ago.

The number of unemployed persons is relatively small. Unemployed here means either persons not having a job at the time the survey was taken or persons not having worked for more than three months of the previous year. The reason for this small proportion of unemployed is the fact that there is a variety of jobs available in Chaguanas. These are either on a part-time or a permanent basis. There is, therefore, a greater concentration of working population here than in areas outside Chaguanas where much of the population is involved in growing sugar cane, rice or market garden crops or ekeing out an existence on small non commercial farms. These are highly seasonal operations.

The population of professional persons is relatively high. Again the centrally located, relatively densely

and the potential for automation in the design and manufacturing process.

The paper is organized as follows. In the next section, the concept of ergonomics in design and manufacturing is introduced.

In the third section, the ergonomics of design and manufacturing is discussed.

In the fourth section, the ergonomics of manufacturing is discussed.

In the fifth section, the ergonomics of design and manufacturing is discussed.

In the sixth section, the ergonomics of design and manufacturing is discussed.

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In the thirteenth section, the ergonomics of design and manufacturing is discussed.

In the fourteenth section, the ergonomics of design and manufacturing is discussed.

In the fifteenth section, the ergonomics of design and manufacturing is discussed.

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In the twenty-first section, the ergonomics of design and manufacturing is discussed.

In the twenty-second section, the ergonomics of design and manufacturing is discussed.

In the twenty-third section, the ergonomics of design and manufacturing is discussed.

populated, commercially advanced concentration is the reason for this. Here are the doctors, the teachers and lawyers. Teachers form the majority of this category. These professionals prefer to live here rather than outside of Chaguanas, where at least they can come in contact with one another, or work at their respective jobs without too much interference or too many inconveniences.

Wages

The average income earned per family is \$2,300 for the Negroes, \$2,500 for the Others and \$2,320 for the East Indians.

TABLE XVII

INCOME EARNED IN CHAGUANAS

	East Indians	Negroes	Others
Average income per family	2320	2300	2500
No. in family	7.0	5	6.5
Average per capita income	331	460	384

The Negroes earn the highest per capita income. This is explained by the fact that in Negro families children go out to work at a much earlier age and more often, than in the East Indian or Other families. On the average, therefore, there are more persons earning a wage than in other ethnic groups. For example, East Indian women rarely work for an employer or send

girl children out to work. The East Indian family is also larger and is more concentrated in agriculture activities where wages are generally lower and working hours longer. Also many of them are self-employed and therefore, do not declare a wage as such. Besides East Indians and Chinese are very secretive about their total earnings and it is not uncommon to find them declaring lower wages than they have actually received. The Negroes, on the other hand, work in the factory or in construction or on the roads.

In the category "Others" the wages earned by the White population is not included, which would have made average per capita earnings considerably higher. Chinese families like the East Indians tend to keep their children at home where invisible income cannot be calculated. These children help in the shops, stores, or in other commercial enterprises.

The average wage of a sugar worker on the estate is \$2.75 per day in the field and the office staff in 1959 averaged \$847. per annum. Average earnings for all sugar employees other than office, managerial or administrative staff was \$482.

On peasant farms workers make between \$2.00 and \$3.75 per eight hour working day. On Endeavour Estates Ltd., the average wage paid is \$2.56 per worker per day. The overseer of this estate received "between \$300 and \$400 per month." Workers in rice fields average \$3.00 per eight hour day.

However, because work is done by task, i.e., an allotted amount to be done for a certain wage some fast workers can make as much as \$5.00 per eight hour day. In the market gardens a worker averages \$4.00 per day.

In industry wages are much higher. A tractor operator makes sixty five cents an hour and a truck operator about the same. An electrician gets about seventy-five cents per hour. A "Driver", or factory or field superintendent, averages about \$250 per month and overseers range from \$300 to \$600 per month. All overseers are white because of apparent discrimination in the employment of overseers on the part of the plantation owners.

In the professional group non Graduate teachers receive between \$120 and \$400 per month, while Graduates earn between \$450 and \$720 per month. Doctors claim to make about \$12,000 per annum but a secret survey of 1964 showed that two doctors in the area averaged \$1,750 per month with office calls only.¹ Lawyers make the same as doctors and persons in the Civil Service the same as teachers. A sales clerk in a department store makes about \$12 to \$15 per week.

Per capita income for Chaguanas is \$360 per annum as

¹Pers. Comm. Two nurses wishing to remain anonymous, Chaguanas, 1964.

compared to \$880 for Trinidad. What is most noticeable here as in other agricultural parts of the island, is the relatively great gap in wages between the unskilled workers and the professionals. Chaguanas being more than fifty per cent unskilled, is in other words a low income earning area.

(vi) Land and Labour Productivity

This section is designed to assess the present and potential land and labour productivity and to advise on whatever possibilities there are for improving the area.

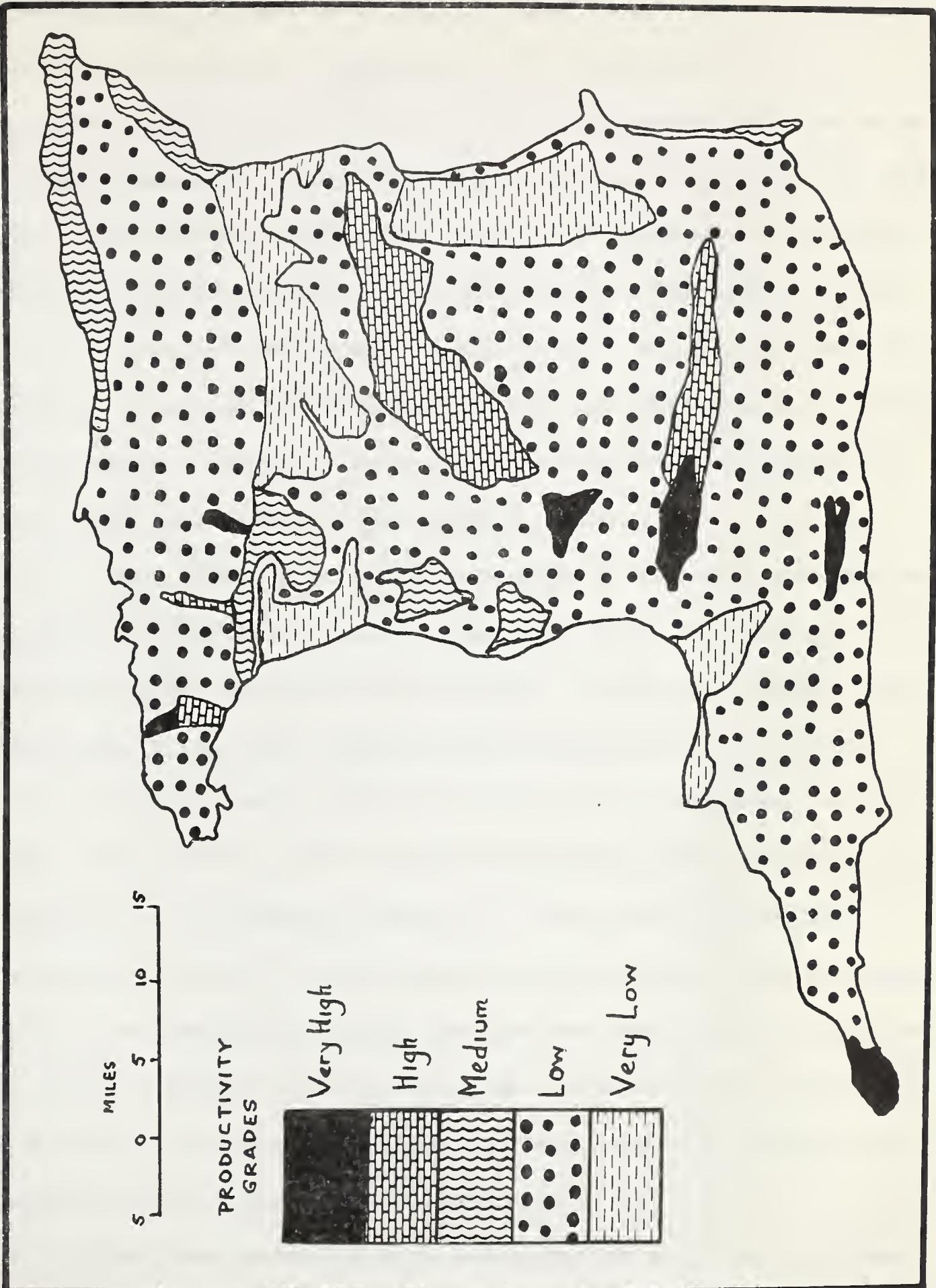
Land Productivity

Ninety-three per cent of the area is under permanent use and seven per cent under scrubland. From a cursory glance it would appear that Chaguanas is being adequately used but once a closer examination is made of the area it is found that many major improvements can be made in the area.

Agriculturally it seems that land under sugar cane is capably used. Averaging forty tons of cane per acre which is sold at \$15.00 per ton, each acre yields \$600 worth of canes per year. This is possible because of large scale management and operation of the plantation, the use of adequate machinery and good types of plants and fertilizers. Also because of adequate supervision, poor quality hand labour is virtually

Figure 9.

TRINIDAD LAND PRODUCTIVITY



eliminated and stealing of the canes is not as rampant as on peasant farms, where poor quality hand labour which is highly expensive is found. The absence of a monoculture on the peasant farms brings yields to as low as twenty tons per acre. Farmers, however, claim that sale of other crops grown on the farms makes up the deficiency and in most cases even exceeds total production value on the plantation. The lower production of cane on the peasant farms is also due to the poorer quality plants and inadequate amounts of fertilizers used by the farmers. Farmers also claim that the plantation owners are to be blamed for poorer quality plants.

What is necessary to improve small farmers cane yields is the intervention by some Government body to negotiate between farmers and plantation owners. The Sugar Workers Trade Union has tried many times in this direction but of little avail. Also a restrictive quota is put on the amount of farmers' canes to be ground at the factory and this is surely no incentive to increase production. The peasant farmers are therefore content, in many cases, to make sugar cane a second crop. One reason why sugar cane is not completely eliminated on peasant farms is that otherwise the land would be too much for a family to work as market gardens, and too costly to be put into some other form of agriculture.

The land under cocoa, coffee and to some extent under

older coconut and citrus fruit trees could be much more capably used. Because of the age of the trees and the falling prices due to increased production in other parts of the island, Chaguana plantations have been left in a relative state of abandon. Too much hand labour is necessary especially in the harvesting of the crop and this has become increasingly expensive because of recent increased wages. Much cocoa, coffee and coconut land can be put under new citrus or bananas. Another possibility which has worked in the past is the leasing of these lands to landless citizens for the growing of vegetables and root-crops both for domestic and commercial use. These lands can also be good industrial and residential property.

Market gardens and to a certain extent new citrus fields are the only two agricultural activities which show significant profits. It has already been shown where a five acre plot produces \$7,000 profit per year. Other land can be brought under production not for the local market but for other Trinidad markets, and for export. This could be made possible by a highly organized cooperative which would ensure better methods of production, good seeds and fertilizers, better methods of storage and marketing, standardization of products and a general re-orientation of agriculture. The management of the citrus industry has worked towards these

ends, and the results it has achieved should be an incentive to those persons connected with the other agricultural activities.

The scrubland is used for the grazing of peasant cattle and draught animals. Because of hardening of the soil due to lack of moisture and phosphorous, and also by repeated burnings, plantations have been abandoned. Such a situation can be easily rectified by the addition of proper nutrients and provision of water from a creek not more than two hundred yards away.² A well organized dairy farm is a necessity in the area and what better place is there than this? The Trinidad Government helps towards this end with the provision of a subsidization of fifty dollars per acre for the growing of Pangola grass and with better breeds of Holstein cattle. There is a growing local market for milk and with the opening of the Nestle's Limited plant 8 miles away the market for bulk milk is assured. Religious practices on the part of the Hindus in the area will have no adverse effect on this industry.

Generally the built up area is amply used. There can be more stores carrying specialty goods and mechanical parts. Results of the survey showed that businessmen are reluctant

²Pers. Comm. Mr. Barnwell, Dept. of Agriculture, San Fernando, 1962.

to go into highly specialized commercial activity because of the lack of trained personnel in the area and competition from the stores in Port of Spain. Better customer services can be encouraged and goods can be sold at cheaper prices. The imported materials still have too much prestige value attached to them. Locally made shoes and hats of a similar type and quality are available at cheaper prices, but because of the businessmen's inability to "sell Trinidad," such items remain in the stores. A restrictive quota on imported goods can alleviate such a situation.

Labour Productivity

Basically because of low wages labour productivity is relatively low. All sectors of the economy therefore suffer. This is especially true on the plantation where it is estimated that productivity is only one half what it could be. If wages, which are estimated to be seventy-five per cent less than that which can be profitably paid, were raised there is the common feeling that labour productivity would increase. The result is a discontented working populace, sulking, destroying the machinery, or taking frequent smoking breaks, because it cares little of the rate or stage of production.

It is not uncommon to find teachers being repeatedly late for work or not reporting for their jobs for periods as

the first two dimensions of the model were found to be significant in explaining the variance in the dependent variables.

The results of the second step of the analysis are presented in Table 4. The results show that the first dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the third step of the analysis are presented in Table 5. The results show that the second dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the fourth step of the analysis are presented in Table 6. The results show that the third dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the fifth step of the analysis are presented in Table 7. The results show that the fourth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the sixth step of the analysis are presented in Table 8. The results show that the fifth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the seventh step of the analysis are presented in Table 9. The results show that the sixth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the eighth step of the analysis are presented in Table 10. The results show that the seventh dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the ninth step of the analysis are presented in Table 11. The results show that the eighth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the tenth step of the analysis are presented in Table 12. The results show that the ninth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the eleventh step of the analysis are presented in Table 13. The results show that the tenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twelfth step of the analysis are presented in Table 14. The results show that the eleventh dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the thirteenth step of the analysis are presented in Table 15. The results show that the twelfth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the fourteenth step of the analysis are presented in Table 16. The results show that the thirteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the fifteenth step of the analysis are presented in Table 17. The results show that the fourteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the sixteenth step of the analysis are presented in Table 18. The results show that the fifteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the seventeenth step of the analysis are presented in Table 19. The results show that the sixteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the eighteenth step of the analysis are presented in Table 20. The results show that the seventeenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the nineteenth step of the analysis are presented in Table 21. The results show that the eighteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twentieth step of the analysis are presented in Table 22. The results show that the nineteenth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twenty-first step of the analysis are presented in Table 23. The results show that the twentieth dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twenty-second step of the analysis are presented in Table 24. The results show that the twenty-first dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twenty-third step of the analysis are presented in Table 25. The results show that the twenty-second dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twenty-fourth step of the analysis are presented in Table 26. The results show that the twenty-third dimension of the model explained 10.2% of the variance in the dependent variables.

The results of the twenty-fifth step of the analysis are presented in Table 27. The results show that the twenty-fourth dimension of the model explained 10.2% of the variance in the dependent variables.

long as twenty eight days. The Trinidad Government in 1965 passed legislation with the aim of eliminating this flagrant disregard towards a sense of duty. A Public Service Commission also supervises the selection of teachers and has recommended increased wages in all sectors of the Civil Service. However, inefficient civil servants who blame their bungling on outmoded methods and poor working conditions are still present. The other services need a complete revamping in their attitude towards the public.

The end result of all these poor attitudes towards work is a partly inefficient society, poor, abusive of whatever amenities are available, using poor techniques and blaming all on the Government. The whole situation to everyone, with few exceptions, seems a ridiculous circle in which graft and corruption for the achievement of anything is rampant and productivity is low.

What is needed is an Economic Commission to investigate the main grievances of the working populace. This can be done with the cooperation of the plantation on the one hand and the education of the labour force on the other hand. A minimum wage scale could be effected to prevent the exploitation of unskilled labour by both Estate owner and Government employer. Only then can Labour productivity increase and better conditions exist.

(vii) The Changing Face of Chaguanas

Chaguanas is undergoing an era of great change in its total landscape. Prior to 1947 the area between the market and the Southern Main Road in Montrose was in cocoa and sugar cane. Since then has grown up a completely new subdivision of over 100 buildings.

Since 1957 there have been 107 new buildings constructed, twenty-two per cent of all the buildings in the area have been enlarged and twenty-seven per cent have had some repairs done to them. Most of the new buildings are found on the lands of Endeavour Estates where cocoa, citrus and coconut fields have been cleared for commercial, industrial and residential purposes.

Throughout the area there seems to be the ever-present competition for space between agricultural and built-up areas. The latter is gaining rapidly, and Chaguanas with its present growth will be bursting at its seams in the next ten years. This is evidenced in the recent increased growth of population, the attraction of industries into the area and the provision of amenities which were formerly only found in the large urban concentrations. Rent is relatively cheap and the area is within easy commuting distance of areas which offer higher paying and better jobs.

CHAPTER VI

THE POLITICAL, SOCIAL AND CULTURAL CHARACTERISTICS

This section tends to evaluate the changes which have taken place in the social and economic structure of the community by the introduction of party politics based on racial characteristics.¹ In order to make such an analysis it is necessary to reiterate certain factors of the historical development of the community.

Basically it can be said that Chaguanas is unique. The cultural patterns of the town have developed out of a curious history, a history involving two alien races coming from different areas completely different in the social structures, agricultural practices, religious adherences and being at different levels of development. These two races were forced together by a third race, the European white, who in pursuit of profits from his plantation, neglected, in some instances partially, but at most times completely, the education of the races, their values and beliefs. From the very outset, therefore, there was bound to develop feelings and hopes which were being jailed in the hearts of the individuals. Once the bonds

¹Opinions expressed by over ninety per cent of the persons interviewed.

were broken there were to be expected major changes. These came in 1956.

Politics before 1956.

Prior to 1956 with the absence of organized political parties there was throughout Trinidad a combined opposition of both Negroes and East Indians to the traditional policy of colonial representation. Chaguana, being part of the County of Caroni which had one elected representative on the Trinidad legislature, was represented by an East Indian, for the area is dominantly East Indian populated. Liaison between the races was expressive not of racial antagonism but of labour's traditional hostility to the government, the employer's class and in fact the white population. It can be said that the political disadvantages from which both Negroes and East Indians suffered overshadowed racial differences and united their leaders in common opposition to the government.²

By 1947 with the advent of adult suffrage the political powers began to shift from the white minority to the hands of the locals. The superior educational advantages of the Negro at that time enabled him to gain some political advantages over the East Indian and the challenge to white political

²Craig, Hewan. The Legislative Council of Trinidad and Tobago, London: 1951, p. 91.

supremacy has come from the Negro rather than the Indian whose leaders faced the racial consequences of constitutional change.³ With the decline of political power of the white community the Negroes and the Indians have become the major political and economic forces.

By 1956 there had arrived in Trinidad, The Peoples National Movement under the leadership of Dr. Eric Williams and the Democratic Labour Party under Bhadase Maraj.

The 1956 Elections and Afterwards

From the outset the racism of the two parties was apparent. Both leaders vigorously denied that their parties were racial but from their choice of personnel and advisers it was obvious that the parties were based along racial lines. The P.N.M. had two major advantages. Firstly, it was comprised of persons of a much higher educational level than the D.L.P. Secondly and more important, the Negro was the major racial group in the island and thus expected more representation on the Legislative Council. The results of the election were that in the rural, agricultural areas with an East Indian majority the D.L.P. won the seats. In the more urban, industrial and less agricultural areas the representatives belonged

³ Ibid., p. 91.

to the P.N.M. Overall the P.N.M. had a majority in Council and Dr. Williams was the first Premier. For the first time a Trinidadian, other than white, was the leader of the Government.

In Chaguanas, politics had become something of a race war. Things had come to a fever pitch on the day before the elections when a riot broke out in which Negroes opposed East Indians. Some arms were broken, East Indians were put into jail and there were attacks on homes and families.

With the 1956 election over, the words "coolie" and "nigger" were now very explosive ones having an even more racial overtone to them than previously. Small gang wars broke out. Clubs were formed which were exclusively "coolie" or "nigger." A change took place in shopping habits in the market, stores and groceries. The Vedic School became the "coolie" school, the Government School in St. Thomas the "nigger" school. The racial consequences of constitutional changes were being felt. This curious history of settlement of two races whose feelings were jailed was now being realized in full force.

Employment, Religion and Society Characteristics

(i) Employment

Because of the dominance of Negro representatives on

the Legislative Council many Negroes of the area feel that they have become a sort of superior man. As a result many basic changes in employment have taken place with its resulting effect on the major sectors of the economy.

TABLE XVIII

MAJOR WORKING CATEGORIES BY ETHNIC GROUPS IN CHAGUANAS

	East Indian	Negroes	Others
Professional	9.3	5.2	12.5
Services	10.2	14.8	62.5
Skilled	12.1	10.4	12.0
Unskilled	65.5	64.4	13.0
Unemployed	2.8	5.2	-

Throughout the area and within each ethnic group there is a dominance of unskilled labour. In the "Others" category the persons employed in the services form a majority, but this is because when the survey was taken only the Chinese persons questioned gave their occupation, and they are basically in the shop, restaurant and laundry business.

The proportion of Negroes in the services is gradually increasing. Many younger Negroes with the necessary education are going into the Police Force and other sectors of the Civil Service. These are becoming Negro jobs and East Indians who

enter such services, especially the Police Force are looked upon without approval by other East Indians. Because Chaguanas is populated mainly by East Indians many of them still continue to enter the Civil Service here.

Of the professionals, teachers form the majority. Many of these teachers live in Chaguanas but work outside of the area. Since the elections, the various denominational school boards have become even more biased in their employment of teachers. The Mabasabha Board on the whole employs only East Indians, and Hindus at that. In 1956 the President of this board was also the leader of the Democratic Labour Party and as a result of the election, with his Party's defeat it was felt that restricting employment to East Indians only, was one way of getting back at the Negroes. Similar tendencies are noted among the other boards.

It is with the unskilled workers here as in other parts of the world that the greatest amount of race consciousness is shown. Formerly, East Indian rice growers did not care whom they employed as long as the job was done. In fact they preferred to employ Negroes because they felt that Negroes worked much more quickly, if not less efficiently, and generally for lower wages. These workers were capable of doing the more strenuous jobs like weeding, forking or levelling, leaving the more specialized jobs in the rice fields to the East Indian.

In 1962 and again in 1964 it was noted that there was an absence of Negro workers in the rice fields. Rice growers, on being interviewed, claimed that Negro workers were demanding more money, were becoming more inefficient in their working habits and attendance at jobs, that they were refusing to work for East Indian employers. In some cases it was found that these reasons were true, but the East Indian growers were unwilling to state that they were refusing to employ the Negroes because they appeared no more as co-workers of equal ability, but as a competitive racial group.

Similar instances have been found with employment on the sugar plantation, the roads and in stores. Where there was an East Indian supervisor, driver or store owner only East Indians were employed. The same situation was noticed with the Negro employer. Both groups claim inefficiency, higher wages, unfair demands for extra time to do other jobs, and poor punctuality, as the major reasons for discriminatory practices. What they have failed to mention is that they have become too competitive in their outlook.

This point of view is emphatically denied by many other students of West Indian racial situations. It is the argument of this study that such claimants have done most of their research in the more urban, less agricultural areas.

the 2000s, and it seems that the trend will continue. This is due to the fact that the world's population is increasing rapidly, and there is a growing demand for food. In addition, the cost of food has been rising steadily over the past few years, which has led to inflation and economic instability. The impact of climate change on agriculture is also a significant factor, as it can lead to droughts, flooding, and other environmental disasters that can damage crops and reduce yields. Finally, the global economy is becoming more interconnected, which means that price fluctuations in one part of the world can have a ripple effect across the entire system. All of these factors are contributing to the current situation where food prices are at record levels and there is concern about future availability.

In conclusion, the high price of food is a complex issue that is influenced by many different factors. While there is no simple solution, it is important to address the underlying causes and work towards sustainable solutions that can ensure food security for everyone.

Dr. Williams' view that his party is non-racial is what he would like it to be. The fact that his party has East Indians or Chinese does not guarantee that it is for racial equality. Dr. Williams himself would like this, but the other members of his party have not worked towards this end. They have preached racism in their campaigns of the other two elections since 1956 and the end result has been greater tension between the two dominant groups.

This programme "to eliminate the tensions which threatened to develop between the Negroes and the East Indians on the sugar plantations in everyday life" has had the opposite effect. The aspects of the party on "political education, the education of the voters, at large mass meetings whose cosmopolitan and inter-racial audiences are a lesson to the world at large"⁴ have failed. Instead what is found especially in Chaguanas, is a big cleavage between the two major groups, a society riddled with racism, demogogy and partisanship.

(ii) Religion

Religion has always been one of the main linking forces in the Trinidad society. In Chaguanas there have always

⁴ Eric Williams. "Race Relations in Caribbean Society," in Caribbean Studies, a Symposium, ed., V. Rubin, Seattle, University of Washington Press, 1960, p. 59.

existed close ties among all persons of the same religion. However because religion has been to a certain extent based on racial characteristics, there has tended to be some sort of covert competition between the religions. Where there was a mixture of racial groups among the various religions this competition was not as noticeable.

With the election of 1956 however, the situation changed. Religious speeches were a matter of election campaigns. Services were politically charged depending on the race of the congregation. Funeral services or "wake nights"⁵ became opportune moments for the Negroes to practice their once famous Shango Dance. The general trend was a "Back to Africa" emphasis this time the Africa being Trinidad.

The East Indian Hindu in retaliation to this in his prayer meetings or "Bhagwats" at which Indian delicacies are served, began to discriminate against serving the Negro attendants. True the Negro attended with the sole purpose of enjoying this treat but why deny him this source of joy when there was much to be served?

The Negroes and the East Indians today have learned to tolerate each other after the immediate aftermath of the last

⁵ The night preceding the funeral when the community gathers at the home of the deceased to pay its last respects to the deceased.

An African dance which drives away the spirit of a dead person.

three elections. It is not certain whether this situation would worsen or become better. The recent racial explosion in British Guiana with its murders, burnings and slaughter did not help greatly and one can now hear talks of "Trinidad for the Nigger, BG for the coolie." The Others form a significant minority and are not involved in this situation.

Attitudes of the Chaguanas Population towards the Political Parties and Racial Groups

In order to fully understand the racial situation and the resultant conditions of relationships between the various groups, the 1964 survey was carried out. Of the returns to questionnaires only seventeen per cent answered the questions asked. This relatively poor return attests to the fact that people are unwilling to commit themselves on the question of race. Of those who answered the following results were apparent.

The following table shows that generally East Indians are more in favour of Negroes than Negroes are in favour of themselves. This answer is surprising because of attitudes expressed verbally. It is to be concluded, however, that East Indians tend to lie about their racial tolerance as was shown in an earlier section. This brings out the fact that East Indians are very secretive and tend to be dishonest about

TABLE XIX

PER CENT OF ETHNIC GROUPS IN CHAGUANAS IN FAVOUR OF OTHER GROUPS, POLITICAL PARTIES AND LEADERS

	East Indian		Negro		Other	
In favour of	Yes	No	Yes	No	Yes	No
Negroes	80	20	65	35	35	65
Dr. Williams	70	30	95	5	50	50
P.N.M.	4	96	95	5	35	65
East Indians	98	2	25	75	65	35
Capildeo ^a	60	40	25	75	55	45
D.L.P.	65	35	25	75	65	35

^a Dr. Capildeo became the leader of the Democratic Labour Party in Trinidad after the elections of 1961. He is East Indian.

personal inadequacies.⁶

Generally it seems that Dr. Williams is much liked by the community. He is the "best man," "the most educated political leader," "the most honest politician," "the only person to achieve anything for the common good." East Indians in general, tend to think he is an able leader, much more capable

⁶V. Rubin, "Approaches to the study of National Characteristics in a Multi-Racial Society," International Journal of Psychiatry, Vol. 5, 1959, pp. 20-26. Also Lowenthal, D., pp. 84-90.

than the Dr. Capildeo who, it is claimed, spends more time in England than at home. This is where racial tolerance ends.

Once the analysis of party politics begins it is noted that both races tend to think that the opposite party is no good. Only four per cent of East Indians are in favour of the P.N.M. The Negroes are a bit more tolerant of the D.L.P.: which twenty-five per cent of them support.

This analysis has tended to cover only a very small percentage of the total population. Of those persons who answered most were in the under thirty year age group. It was found that the older members of the community were much more apt to be non-committal on such racial matters. The younger persons are much more tolerant of each other.

Generally it appears that East Indians are much more conscious of their race, their cultural heritage and their personal possessions. It seems to them, that with the Negroes gaining political power, the Negroes are coming into more social prestige throughout the island. This to the East Indian is a forfeiting of his rights for he wants to cling to his own position which he holds in Chaguanas. Among the older East Indians allegiance to India is coming back into vogue once more. The younger East Indians wish to remain Trinidadians. The Negro, on the other hand, expresses fears of the more rapid growth of the East Indians, a fact which he insists

will cause them to become politically strong in the near future.

Migration

Throughout its development Chaguanas has been an area to which persons have come because of employment opportunities in agriculture, the services or in other spheres of the economy, because of cheaper housing or land, or mainly because they wanted to get away from the hustle of city life.

Since 1960 this tendency has somewhat slackened because of increasing population growth and rising costs of houses and land. Now there tends to be a trend towards migration out of the area.

In 1962 it was found that twenty four persons left Chaguanas. The main area of migration was England where there were the opportunities for work, study and the impending British Immigration Act which would put a restrictive quota on West Indian migration to the United Kingdom. Also at this time Trinidad was achieving nationhood which to those persons leaving was a "niggerhood."⁷ Of the persons leaving all were over 22 years old and only one was a Negro. He left with the main aim of finding a job in England.

⁷ A coined word meaning a Negro ruled nation.

TABLE XX

NUMBER OF PERSONS IN CHAGUANAS WILLING TO LEAVE CHAGUANAS

Destination	East Indians	Negroes	Others
Trinidad (other area)	40	60	10
United States	15	20	-
Africa	-	10	-
Tobago	-	10	-
United Kingdom	15	-	-
Canada	30	-	-
India & Pakistan	15	-	-
Other Places	-	-	-

The above table shows that about fifty per cent of the persons willing to leave Chaguana would like to re-settle somewhere else in Trinidad. Among the East Indians, the consensus of opinion is that they would prefer to live where there is more land available for cultivation, where they would be nearer their relatives and away from the tensions that Chaguana has. Places like Felicity, Charleville and Penal, which are more Indian dominated areas are mentioned.

The Negroes would like to move to the northern and urban parts of Trinidad where there is much more of their cultural activities like dancing, steelbands, and sports.

They name places like Laventille, Santa Cruz and Port of Spain which are Negro dominant.

Of the foreign areas mentioned it is apparent why Negroes would like to go to Africa and East Indians to India and Pakistan. Negroes refuse to go to the United Kingdom because of the apparent racial tension there, yet they are willing to risk going to the United States, because of American sponsored worker migration. They think that they can remain in the United States after completing their period of work. Also the movies with their bright lights and dancing girls have helped as an attraction to this area.

The number of East Indians willing to go to Canada is high. The reason is that because I have studied in Canada this had some effect on the replies received. Also reports from England and the return of some migrants, have taken out some of the glamor of the desire to visit England. A few persons expressed an honest desire to go to Canada to study.

Generally it seems that persons are willing to move to places which to them appear to offer as little as possible mixing and social interaction of the two major races and contact with a foreign element hostile towards race. This fact is important in understanding the settlement of this community.

the first time in the history of the world, the people of the United States have been called upon to make a choice between two opposite ways of life, between two different philosophies, one of which提倡 peace, equality, freedom and the other which advocates仇恨, discord, racial pride and antagonism to every man who is not a member of its inner circle.

The choice is ours - we must make it. We have made it. We stand for the philosophy of peace, equality and freedom. We stand against the philosophy of hatred, discord, racial pride and antagonism to every man who is not a member of its inner circle.

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The Chaguanas Market as a study in Cultural Geography

Perhaps the place at which racial conflicts are most noticeable is the Chaguanas market. More than 40,000 persons come here to buy and sell on a week-end. Saturday is the big shopping day in Chaguanas and some other parts of the island. The products of the garden, the imported and locally made clothing, fabrics and wares are sold to persons who come from nearly every part of the island. The importance of this market lies in the fact that Chaguanas is centrally located in the heart of the agricultural belt of the island.

Of the 2,000 or more vendors, ninety-two per cent are East Indians. These sell mainly vegetables, rice and products of the citrus groves, but can also be found selling meat or fish and East Indian condiments. The Negroes deal mainly in root crops like cassava and yams and a few in vegetables from their small gardens.

There is the curious fact that all the East Indian beef vendors are Muslims. The Hindus think that to eat beef is unclean and therefore refrain from selling it also. There is only one Negro beef vendor but he is rarely if ever visited by an East Indian buyer, because his meat is "unclean since he has not said the Muslim prayers before slaughtering the cow."

On the other hand there is no East Indian pork vendor. To most East Indians, regardless of religion the eating of

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The Chaguanas Market



Locally grown foods on sale at the
Chaguanas Market

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pork is "unclean, and associated with Negroes." However East Indians of the Chamar caste persevere in the eating of this meat and are looked upon scornfully by other Indians. Seeing that they can buy the meat only from Negroes, they are looked upon with even more disgust.

Because of the post 1956 attitudes towards race there have occurred basic changes in the shopping habits. My survey carried of 1962 showed that Negro customers of Indian vendors dropped off by sixty-two per cent between 1960 and 1962. Likewise Indian customers of Negro vendors dropped by over seventy per cent. Negro customers of Negro vendors increased by seventy-three per cent and Indian customers of Indian vendors by seventy-one per cent.

Because of these changes and with the increased demand for goods of all kinds because of both population growth and increased wages the numbers of vendors and the volume of trade of both groups have increased. Negro vendors between 1962 and 1964 increased by twenty-three per cent and Indian by nineteen per cent.

The best way to illustrate changes in the shopping habits of Chaguanas is to cite the experiences in which one specific vendor has been involved. He is East Indian and has been selling at the market for thirty-three years. He sells the products of his garden, mainly sweet potatoes, oranges and

bananas together with imported fruits like apples and grapes, vegetables and root crops such as sweet potatoes and yams.

Before 1956 he had twenty-four regular Negro customers and over fifty irregular ones. After 1956 the numbers began to drop. In 1962 a survey showed that there were only four regular and forty-six irregular customers. By 1964 the number had increased again but not to pre-1956 level. The number of his East Indian customers has tended to remain constant but his volume of trade has decreased by about ten per cent.

These changes are quite significant because the vendor in question has been associated with the P.N.M. or Negro party for in both the 1956 and 1961 elections his relative was the candidate in that constituency. Despite this fact the Negro customers have dropped in numbers. On the other hand the Indian buyers have not bought from him as much. What has happened is that the Negroes look upon him as one of those who is opposed to them; the Indians have associated him with the Negro party.

Reports from Indian buyers questioned at the market were as follows:

"I would not buy from a Negro man once there is an Indian man selling the same product . . . I would only buy from a nigger man only if I need the thing badly."

The Negro buyer is less emphatic.

the first time, and the first time I have seen it, I am very much interested.

It is a small, slender, pale bird, with a long, thin, slightly decurved bill.

The upper parts are a uniform pale greyish-green, with a few dark spots on the wings.

The lower parts are white, with a few dark spots on the wings.

The tail is long and deeply forked, with a few dark spots on the wings.

The legs are long and slender, with a few dark spots on the wings.

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"I have to buy my rice from an Indian man because he is the only one who sells it." "If both Indians and Negroes were selling rice I would still buy it from the Indian man because he knows how to make better rice."

Other replies can be quoted which would show the same result. The Negro, in certain instances, wants to show his supremacy of race but in some cases would be less dogmatic than the East Indian. The East Indian on the other hand wants to cling to the position which he formerly held, at least in Chaguanas, and is willing to adopt every possible means to do that.

Generally in 1964 it was noted that among the older, more mature population race consciousness, though still present, was less noticeable. Maybe the achievements of nationhood has had some effect in this direction. However, among the younger population there seems to be this hidden hatred especially since the Negro is much more physically strong and sturdy than the East Indian, and thus can resort to violence more easily than the East Indian. In the Market there still are fights with the words "dirty coolie" and "nigger" being used but these are less frequent than in 1962.

The Process of Cultural Assimilation

It is the opinion of most experts on West Indian

culture that cultural assimilation is going on apace in the area.⁸ Trinidad is no exception to this. There are however cases of cultural isolation and these can be found in areas populated mainly by East Indians, although even here some assimilation is taking place. Chaguanas is one example of this latter state.

Creolism is becoming the norm. The majority of persons speak the local dialect, cook local dishes, espouse local beliefs and prejudices. The East Indians, though unwilling to adopt other standards, have subconsciously and rather subtly done so. Certain patterns of diet, dress and economic attitudes are quite distinct between the Negro and the East Indian but these too are changing and the current politics of the island, though based on a clearly racial line, have achieved some form of assimilation through its endeavours on behalf of the welfare of the country.

The Negro has already started to mix by marriage and sexual relationships with the other groups. He is not afraid to admit to such mixtures. The East Indians, too, have more racial mixtures than they care to admit, although generally they tend to live apart from mixing as much as is possible.

⁸ Daniel J. Crowley, "Cultural Assimilation in a Multi-Racial Society," V. Rubin (ed.), Social and Cultural Pluralism in the Caribbean, 1960, pp. 850-854.

The Chinese and the Whites have also begun in this sort of assimilation and one estimate claims that within a few generations they will be completely mixed.⁹

Generally both racial and cultural assimilation have proceeded far in the community, even much more than most East Indians would care to admit. The somewhat similar institutions of slavery and indenture produced parallel results in that there can be no valid claims to an Indian culture or African culture in Chaguanas.

⁹ Ibid., p. 850.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Throughout this study an attempt has been made to analyze and evaluate the factors which have influenced the development and growth of the town of Chaguanas. As much as possible subjectivity and bias have been eliminated but it is believed that once a comprehensive analysis of an area is attempted by some one who has a fairly intimate knowledge of the area, if only merely from the fact of having lived there for twenty years, such subjectivity and bias, though unscholarly, must in some small way appear. Therefore, if this is noticeable to the reader, it is only through the writer's human failings and not by intention that this has happened.

Very little is known of the area prior to the turn of the nineteenth century. Once the sugar plantation system appeared on the scene there came the Negro slaves, the East Indian indentured coolies, the Chinese, Portuguese and other Europeans. There developed a West Indian society resembling many similar societies throughout the island but quite different in many ways. These differences have been enumerated throughout the study.

In order to understand the characteristics of the

community it is necessary to trace the development of the plantation system and the impact which it had had on the structure of the area. Much of the economy of the area depends on the sugar plantation system and the settlement pattern of Chaguanas revolves around the attitudes which have developed out of this system between the two dominant groups, the East Indians and the Negroes.

Like all other groups the East Indians were forced to leave behind much of their culture when they migrated. Although most of them were of low caste, there were a few Brahmins and other high class and caste among them. The barracks and later the rural village tended to break down caste barriers which existed. Christianity, the break-away from the barracks, the adaptation to small agricultural settlements, the accruing of wealth, the mixing with others soon made the society nearly casteless.

The poorer East Indians, together with the Negroes stayed on the plantations or became small landowners or day labourers on the sugar cane fields. Tensions and divisions between these two dominant racial groups were present, but until recently these divergencies were hardly more serious than cleavages within each group on the basis of religion, class, caste or colour.

These small conflicts have recently found expression

in the politics of the island. The two parties which dominate the political scene, although both deny racial orientation, are in fact racially composed. Both parties hope in time, to be the ruling party and to elect their own leaders. The Negro is more afraid in this sense because of the more rapid population growth rate of the East Indians.

Much of the explanation of these attitudes lies in an examination of the rapid changes that have taken place over a comparatively short period of time. From the first arrival of the indentured labourers in 1845 to fifteen or twenty years ago the East Indians formed a group unwilling to participate actively in the total society. Social and economic advancement were limited and Creolization was adopted slowly. But now the East Indian with a better education, venturesome in business, a professional and a Trinidadian is making his mark in the society. This is the situation in Trinidad in general and in Chaguanas in particular.

One of the major problems of the area, therefore, is the peaceful adjustment to racial integration and harmony. This can be accomplished with a better attitude on the part of the Negro in his efforts to govern the island and with a more unbiased and broader social and cultural outlook on the part of the East Indians. In Chaguanas signs of this are already being noted where the East Indian outnumbers the

Negro greatly. In predominantly¹ Negro areas throughout the island and even in small Negro sections in Chaguanas this change is taking a much longer period. What the future is cannot be predicted at present.

Within the community itself the basic problem is the over dependence on the sugar plantation for a form of livelihood. Besides offering seasonal jobs, the wages are the lowest paid. The Caroni Estate Ltd., can to a certain extent dictate the wage price, the condition of work and health and pension services for it is the largest employer in the area.

With the advent of mechanization into the industry there is bound to be immediate unemployment. The plantation owners see this as a way of making even larger profits. The poor labourer will have to seek jobs elsewhere. The long run advantage can be that the labourers would intensify production on their small plots or rent land outside the area for agriculture. This may mean subsistence agriculture at first, with more and more attempts at specialized agriculture.

In other words in areas adjacent to Chaguanas the woodlands can be cleared and cultivated, the fields which are not producing to capacity can be made to do so, the swamps can be dredged, drained and made productive under sugar cane or rice or market garden crops. Here the excess population can be moved out and made to use the underdeveloped land of the County

of Caroni.

Perhaps the question can be asked about the disposal of these products. It must be remembered that the island's population is growing at a fairly rapid rate. The diet of the population is inadequate both in quality and quantity. The increased production can be taken up by domestic consumption and expanded foreign markets.

The Trinidad Government has a very important part to play in this overall expansion, not only in Chaguanas but also throughout the island. Only by subsidizing agriculture, by providing better breeds of crops and better fertilizers, and by seeing that the powerful plantation owners provide better working conditions and higher wages, can the general poverty of the area be eliminated and standard of living raised.

Mechanization of agriculture and its associated change must be a gradual process. Elimination of hand labour cannot come too drastically. The populace must be educated to understand what the changes will mean, for it must be remembered that three quarters of the population are East Indians who in many ways are traditional and difficult to change.

The cow is still a sacred animal. It is to many the provider of milk and labour, but must not be eaten. Dairying can be introduced into the area. The Government has subsidized farmers with the view of increasing milk production and

encouraging dairying throughout the area. This programme is an island-wide one which however needs more efficient operation.

Recently there has been a trend towards some industrialization in Chaguanas. A new engineering firm and a paint factory have located there. Industrialization can be greatly encouraged and will afford greater opportunity for jobs and better wages.

With the advent of Independence to Trinidad more opportunities have been available in the Civil Service and the teaching profession with the opening of new offices and schools. In addition it is hoped that the present revolution in the social structure will be beneficial to the community as a whole.

In conclusion it can be said that problems are numerous and acute. There is surplus labour in the off season, too much dependence on one major crop, too much subsistence agriculture and too much hand labour resulting in low wages and a low standard of living. In addition to these are the ever present cleavages between the two dominant racial groups.

The future however does not loom dark or dismal. The attainment of nationhood it seems, has given a new life to certain areas. It is hoped that Chaguanas is one of those. The Trinidad Motto of "Together we aspire, together we achieve"

must be operative fully. This togetherness is lacking at present. Merely to make an attempt, merely to determine to succeed would be an enormous tribute to the capacity of the citizens of the area, would be a powerful inspiration to a frustrated, racially riddled community, would be a wonderful opportunity for each to come together and live in harmony with his fellow men, regardless of race, colour or creed. This will be their final emancipation from slavery, from penury on the sugar plantations, and from the injustice of colonialism and colonials. This will be a final demonstration that slavery and hatred are not by nature and that the humblest antecedents are not inconsistent with greatness of soul.

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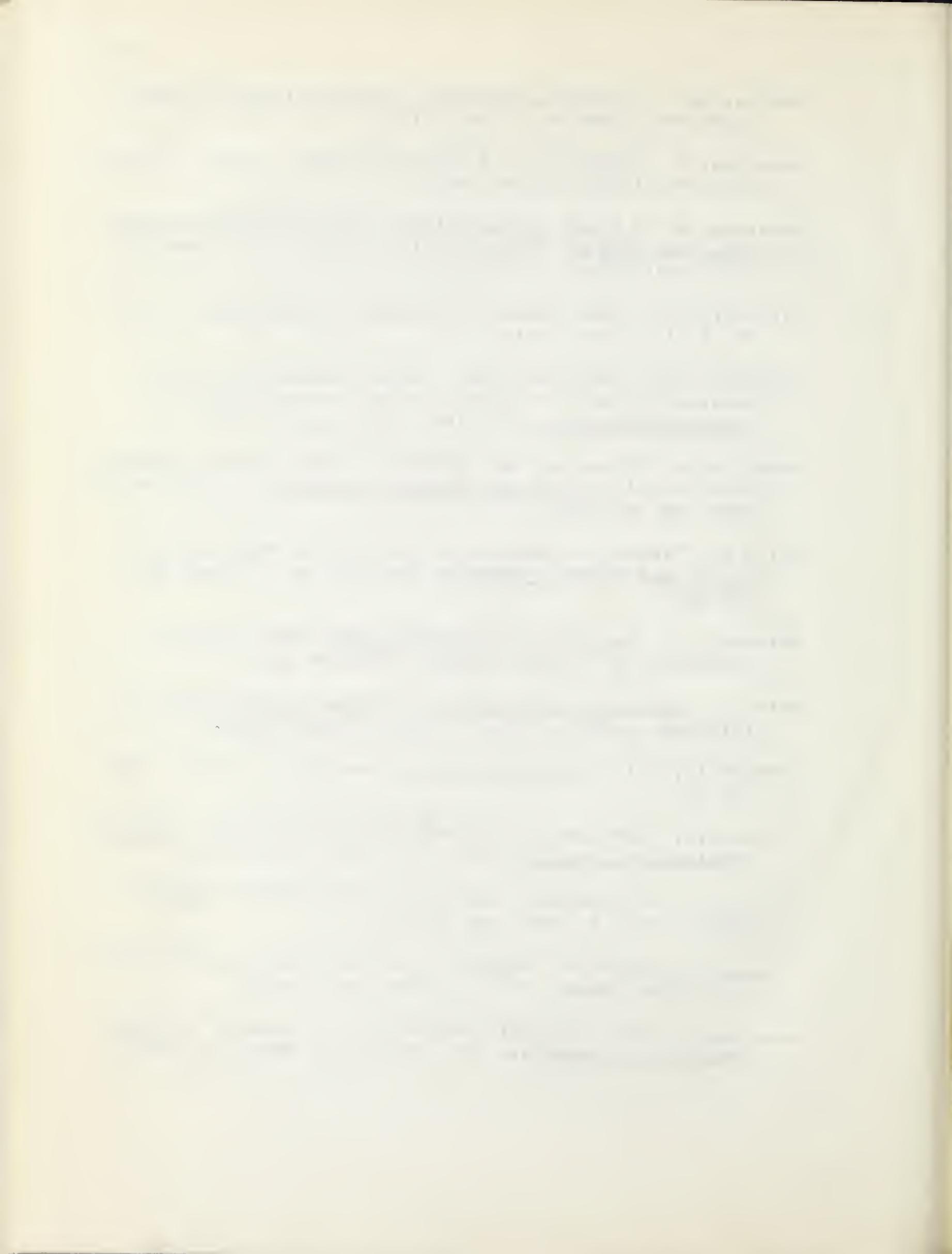
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APPENDIX I

QUESTIONNAIRE

ALL INFORMATION ON THIS SHEET IS KEPT IN STRICT CONFIDENCE

1. How old are you? _____
2. What race are you? _____
3. Are you married? _____
4. Is this your first marriage? _____
5. What race is your wife or husband? _____
6. What religion are you? _____
7. How many children do you have? _____ Girls _____ Boys _____
8. How many of your children are over 15 years? _____
9. How many of your children are attending school? _____
10. How many of your children are married? _____
11. How many of your children are working? _____
12. What type of work do you do? _____
13. What is your average annual salary? _____
14. What does your wife do? _____
15. What is total salary per year of all members of your household?

16. Do you own your house? _____
17. What is value of your house? _____
18. Do you own the land on which your house is situated? _____
19. How many persons live in your house? _____
20. How much land do you own? _____
21. What crops do you grow and how much

22. How many animals do you have (a) cows _____ (b) goats _____
(c) pigs _____ (d) horses _____ (e) chickens _____ (f) others

23. How much do you spend per week on food? _____

24. What do you think of Indians? _____

25. What do you think of Negroes? _____

26. What do you think of Dr. William's and his party? _____

27. What do you think of the D.L.P.? _____

28. Do you like the place where you live? _____

29. Would you think of moving to some other place? _____

30. Where would you prefer to move to? _____

Thank you very much for your kind co-operation.

Respectfully yours,

Ganga B. Rajballie







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